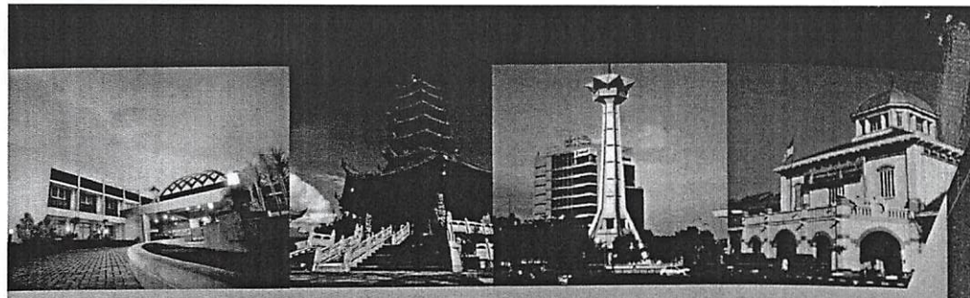

ishhas 2017
Medical Faculty of
Sultan Agung Islamic University

2nd INTERNATIONAL SYMPOSIUM ON HUMAN'S HEALTH AND AGING SCIENCES

"The Role of Hormone and Hormonal Disorder Management for Healthy Human Kind in Aging Population"

SECRETARIAT
Medical Faculty of Sultan Agung Islamic University, Semarang
Jl. Raya Kaligawe KM.4, Semarang, Central Java - INDONESIA 50112
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PROGRAM BOOK INTERNATIONAL SYMPOSIUM ON HUMAN'S HEALTH AND AGING SCIENCES

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PROGRAM BOOK

2nd INTERNATIONAL SYMPOSIUM ON HUMAN'S HEALTH AND AGING SCIENCES

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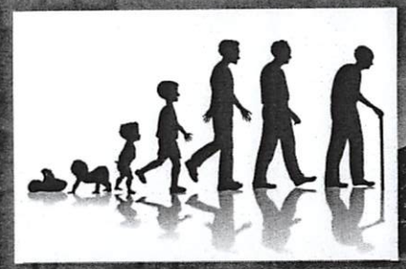

January 27 - 29th, 2017
Aston Semarang Hotel & Convention Center
Central Java - INDONESIA

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INTERNATIONAL SYMPOSIUM ON HUMAN'S HEALTH AND AGING SCIENCES

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"The Role of Hormone and Hormonal Disorder Management for Healthy Human Kind in Aging Population"

Welcome Message

Assalamu'alaikum warahmatullahi wabarakatuh

Medical Faculty of UNISSULA is one of the long running and established private faculty of medicine in Central Java Indonesia. One of the International Program will be held in 2017 by Faculty of Medicine UNISSULA is ***INTERNATIONAL SYMPOSIUM OF HUMAN'S HEALTH AND AGING SCIENCES (ISHHAS).*** ISHHAS is a serial symposium program which is held once every two years organized by Faculty of Medicine UNISSULA. ISHHAS has the unique characteristics which differentiate with other similar events in other institutions because the broad scoop of knowledge about health, aging sciences, and elderly care itself. The theme for the 2nd ISHHAS is: **The Role of Hormone and Hormonal Disorder Management fFor Healthy Human Kind in Aging Population.**

For the 2nd ISHHAS, we would like to discuss about several updates about endocrine especially with elderly problems. The 2nd ISHHAS will be collaborating with Indonesian Endocrinology Association. The output for ISHHAS will be for the publication purposes for international researchers. Furthermore, to extend the market for the targeted audience the preparation for sub themes and speakers appointment who will participate in this event, we would like to organize a pre conference meeting by inviting the Steering Committee from 4 countries which are **Indonesia, Malaysia, Netherland, Jordan and Turkey,** and also representatives from **Indonesian Endocrinology Association** in order to prepare the **2nd ISHHAS.**

Wassalamu'alaikum warahmatullahi wabarakatuh

Chair Person

2nd International Human Health and Aging Sciences

DR. Ir. Titiek Sumarawati, M.Kes

Organizing Committee

STEERING COMMITTEE

- **dr. Iwang Yusuf, M.Si**
  Dean of Faculty of Medicine, Sultan Agung Islamic University, Semarang
- **Dr. dr. Setyo Trisnadi, Sp.K.F., S.H.**
  Vice Dean I of Faculty of Medicine, Sultan Agung Islamic University, Semarang
- **dr. Pujiati Abas, Sp.A**
  Vice Dean II of Faculty of Medicine, Sultan Agung Islamic University, Semarang

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Chair Person :
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dr. Nurina Tyagita, M.Biomed

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Santosa Asmai, SE

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- **Yunus Mustaqim**
- **Nursanti, SE**
- **Siti Rochmah, ST**
- **Ahmad Badarudin**

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- **Dr. dr. Taufiq RN., M.Kes., Sp.And**
- **dr. Nur Anna C.S., Sp.PD., FINASIM**
- **dr. Saugi Abduh., Sp.PD-KKV., FINASIM**
- **Dr. dr. Chodidjah, M.Kes**
- **Dra. Atina Hussaana, Apt., M.Si**
- **dr. Stefani HS., M.Si.Med**
- **dr. Minidian F., M.Sc., Sp.GK**

Event :
- **Dr. Drs Israhnanto Isradji, M.Si**
- **Dra. Endang Lestari, M.Pd., M.Pd.Ked**
- **Azizah H.S., S.Si., M.Si**
- **dr. RR. Pasati Lintangela**

Equipment :
- **Drs. Purwito S., M.Kes**
- **dr. Ulil Fuad**
- **Kamami**
- **Haris Sujatmiko**
- **Accomodation :**
- **dr. Andriana, M.Si.Med., Sp. THT-KL**
- **dr. Bagas Widiyanto**

Consumption :
- Dra. Eny Widayati, M.Si
- Eva Lutfiana

Publication & Documentation :
- Dr. Siti Thomas, SKM., M.Kes
- dr. Ratna Fitri
- dr. Suryani Yuliani, M.Kes
- dr. Meidona Nurul Milla, MCE
- Udi M. Saputro
- Andi Siswoyo

Business found :
- dr. Danis Pertiwi, Sp. PK., M.Si.Med
- dr. Kinanti Narulita Dewi, M.Si
- Slamet

INTERNATIONAL SYMPOSIUM
ON HUMAN'S HEALTH AND AGING SCIENCES
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SCIENTIFIC PROGRAMME

FRIDAY, JANUARY 27th, 2017

07.00-08.00	Registration
08.00-08.05	Preparation Opening Ceremony
08.05-08.15	Reciting Holy Qur'an
08.15-08.25	Welcome Address from Chairman of Committee **Dr. Ir. Titiek Sumarawati, M.Kes**
08.25-08.35	Welcome Address from Rector of Sultan Agung Islamic University **H. Anis Malik Toha Lc, MA, Ph.D**
08.35-08.45	Brief Remarks From FIMA **Prof. Dr. Abdul Rashid Abdul Rahman**
08.45-08.55	Opening Speech from Governor of Central Java **H. Ganjar Pranowo, S.H, M.IP**
08.55-09.00	Official Opening of Ishhas **H. Ganjar Pranowo, S.H, M.IP., with dr. Iwang Yusuf, M.Si, H. Anis Malik Toha, Dr. Ir. Titik Sumarawati, M.Kes**
09.00-09.15	Traditional Dance "Indonesian Heritage" ***Students of Sultan Agung High School***
09.15-09.20	Announcement of Whole Activity ***Master of Ceremony***
09.20-09.40	COFFEE BREAK
09.40-10.00	Plenary: Bioethics and Patient Safety in Elderly Patients **Dr. dr. Setyo Trisnadi, Sp.KF., S.H**
10.00-10.30	Plenary: Are You Addicted to Sugar? The Role of Sugar Intake in The Obesity Pandemic **Prof. dr. A. J. van Der Lely (Netherland)**
	PANEL DISCUSSION SESSION I, **Moderator: dr. Minidian F., M.Sc, Sp.GK**
10.30-10.50	Epidemiology of Thyroid Function Disorder in Aging Perspective **Dr. dr. Kuntjoro Harimurti, Sp.PD -K.Ger**

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10.50-11.10	Pathophysiology of Thyroid Function Disorder in Aging **Dr. dr. Tjokorda Gde Pemayun, Sp.PD -KEMD, FINASIM**
11.10-11.30	Management of Thyroid Dysfunction in The Aging Population **Prof. Dr. Nor Azmi Kamaruddin**
11.30-12.00	DISCUSSION
11.30–13.00	Poster Presentation
12.00-13.00	Lunch, Dhuhur Prayer
	PANEL DISCUSSION SESSION II, **Moderator : dr. Meidona N. Milla, MCE**
13.00-13.20	Role of The Elderly Empowerment to Sustain Family Solidarity **BKKBN**
13.20-13.40	The Role of Growth Factor in Reproductive & Aging Management **Prof. Dr. dr. Susilo Wibowo, Sp.And**
13.40-14.00	Issues in Male Reproductive Disorder: Testosteron With & Without Hypogonadism **Dr. dr. Taufiq RN., M.Kes, Sp. And**
14.00-14.20	Issues in Female Reproductive Disorder **Prof. dr. Samsulhadi , Sp.OG(K)**
14.20-14.50	DISCUSSION
14.50-15.30	Tea Break And Ashar Prayer
15.30-16.30	Oral Presentation
18.30-21.30	Gala Dinner *(ALL PARTICIPANTS)*

SCIENTIFIC PROGRAMME

SATURDAY, JANUARY 28th, 2017

08.00-08.30	Registration
	PANEL DISCUSSION SESSION III
	Moderator : dr. Nur Anna C. S., Sp.PD, FINASIM
08.30-08.50	Evidence of Incretin Physiology in Diabetes: Any Difference Between Asia & The West?
	Prof. Dr. Mustafa Kanat (Turkey)
08.50-09.10	The Burden of Diabetes Mellitus in Indonesia
	Prof. Dr. dr. Ahmad Rudijanto, Sp.PD -KEMD, FINASIM
09.10-09.30	Type 1 Diabetes in Older Adults: Current Concepts on Pathogenesis and Management
	Prof. Dr. Aly A. Mishal, MD, FACP (Jordan)
09.30-09.50	DISCUSSION
09.50-10.50	Oral Presentation
09.50-10.40	Coffee Break
	PANEL DISCUSSION SESSION IV
	Moderator : Dr. dr. Agung Putra, M.Si.Med.
10.40-11.00	Screening of Family Member in Breast Cancer Development
	Dr. Bert. Van Geel (Netherland)
11.00-11.20	The Role of BRCA-1 & BRCA-2 in Breast Cancer
	Dr. dr. Samuel J. Haryono, Sp.B, Sp.B (K) Onk
11.20-11.40	DISCUSSION
11.40–13.00	Poster Presentation
12.00-13.00	Lunch, Dhuhur Prayer
	PANEL DISCUSSION SESION V
	Moderator : dr. Bagus Herlambang, Sp.BTKV, Ph.D
13.00-13.20	Coronary Heart Disease in Asian Population
	Prof. Dr. Abdul Rashid Abdul Rahman (Malaysia)
13.20-13.40	Management of Hypertention in The Elderly Patients With Diabetes Mellitus
	Prof. Dr. Abdul Rashid Abdul Rahman (Malaysia)

13.40-14.00	The Role of Testosterone in Coronary Heart Disease
	dr. MA Sungkar, Sp.PD -KKV., Sp.JP
14.00-14.20	Recent Trends on Acute Coronary Syndrome Treatment Based on Esc Guidelines
	dr. M. Saugi Abduh, Sp.PD-KKV., FINASIM
14.20-15.00	DISCUSSION
15.00-15.05	Preparation for Closing Session
15.05 -15.20	Announcement of Best Oral and Best Poster Presentation
15.20-15.30	Closing Remarks: Dean Faculty of Medicine Sultan Agung Islamic Univerity
15.30-15.35	Closing : Master of Ceremony
15.35-16.00	Farewell Tea and Ashr Prayer
19.00-21.00	Dinner for Speakers

WORKSHOP

SUNDAY, JANUARY 29th, 2017

08.00-08.30	Registration
08.30-09.00	Opening
	WORKSHOP
09.00-09.30	Insulin for Diabetes Management: an Update and in Special Condition (Renal Diseases and Elderly Patients)
	Prof. Dr. Nor Azmi Kamaruddin
09.30-10.00	Insulin Injection Technique for Clinical Practice
	dr. Nur Anna C. S., Sp.PD., FINASIM
10.00-10.30	DISCUSSION
10.30-11.00	how to manage dementia in elderly people with degenerative diseases
	Dr. Maddy Stienstra Liem
11.00-11.30	Epidemiology of Osteoporosis in Elderly
	Dr. dr. Kuntjoro Harimurti, Sp.Pd-K.Ger
11.30-12.00	DISSCUSSION
12.0-13.00	Lunch and Prayer Break
13.00-END	City Tour

ISHHAS-OP-D6

Comparison of Yoghurt and Yoghurt-Tempeh (TEGHURT) Effects on Serum Fasting Blood Glucose and Insulin in Hyperglycemia Wistar Rats

Nyoman Suci Widyastiti[1,a)], Natalia Desy Putriningtyas[2], Kartika Nugraheni[3], Rebriarina Hapsari[4], Siti Harnina Bintari[5]

[1]Department of Clinical Pathology, Faculty of Medicine Diponegoro University
[2] Nutrition Science Program, Health Science Faculty, Respati University of Yogyakarta
[3]Department of Nutrition, Faculty of Nursing and Health Science, Muhammadiyah University of Semarang
[4]Department of Clinical Microbiology, Faculty of Medicine Diponegoro University
[5]Department of Biology, Faculty of Mathematics and Natural Science, Semarang State University
[a)] **Corresponding author: nyoman.suci@gmail.com**

ABSTRACT

Background: Hyperglycemia in the metabolic syndrome lead to increased production of free radicals. Fermented milk (yoghurt) have been shown to improve antioxidant status and revealed significant reduction of fasting blood glucose (FBG) in diabetic probands. Isoflavones aglycones of tempeh (fermented soy product) has an antioxidant effect and antihiperglycemia activity. This study aimed to compare the effects of yoghurt and yoghurt-tempeh (teghurt) consumption on serum FBG and insulin in hyperglycemia Wistar rats.
Methods: Yoghurt was prepared by fermentation of the cow milk with a native strain of Lactobacillus acidophilus dan Lactobacillus casei. Thirty hyperglycemia induced Wistar rats were divided into 6 groups ; administered with Yoghurt (Y), Yoghurt with 2,5%, 5%, 7,5%, 10% tempeh flour (T1-T4) and control group (C). The Y and T groups were fed with 3,6 ml/day of either Y or T for 28 days. The serum FBG and insulin levels were analyzed at baseline and the end of the intervention period.
Results: FBG decreased significantly in Y and all T groups ($p < 0,001$). Although insulin level was increased in Y and T groups, insulin level in all T groups shown significantly increased insulin level than Y groups ($p=0,001$ and $p=0,008$ respectively)
Conclusion: Teghurt could modulate blood fasting glucose and insulin levels in hyperglycemia.

Keywords: *Hyperglycemia, Yoghurt, Tempeh, Fasting Blood Glucose, Insulin.*

ISHHAS-OP-D7

Correlation between Leukosituria, Bakteriuria and Glucose in Diabetes Mellitus (DM) Patients

Indranila KS

Clinical Pathology Medical Faculty University of Diponegoro Semaran
Education Program
Corresponding Author, Email: nila_fkundip@yahoo.com

ABSTRACT

Diabetes mellitus are increasing in globally in the world every year and its cause many complications. DM causes several abnormalities of immune system and it might result in a higher risk of certain infections, including Urinary Tract Infection (UTI). Glucose, leucocyte and bacteria finding in the urine are suggestive in the urine of diabetic patient with UTI. This study was aim to find the prevalence and the correlation between glucose, leucocyte and bacteri in the urine of diabetic patients of Hospital dr. Kariadi Semarang in Semarang. Cross –secrional study desain was conducted on patients with DM. Among that 30 sample in the age of > 20 years. And chi square tests were used to analyze the data, p value of < 0,05 was considered statistically significant, with the confidence interval of 95 %.

Keywords: Glucose, urinalisis, diabetes mellitus, leucocyturia, bacteriuria.

CORRELATION BETWEEN LEUKOCYTURIA, BACTERIURIA AND GLUCOSURIA IN DIABETES MELLITUS (DM) PATIENTS.

Indranila KS

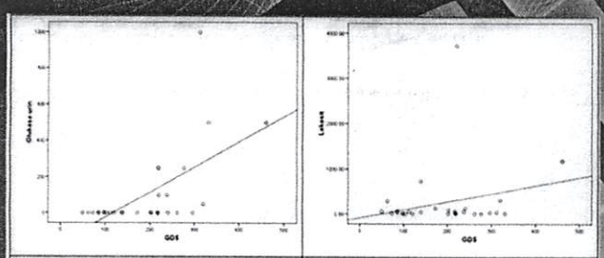
Clinical Pathology Medical Faculty
University of Diponegoro Semarang. Education Program.

INTRODUCTION

Diabetes mellitus in the world increased faster in the last decade, it is about 30 million cases in 1985 to 177 cases in 2000 and is forecast to be 360 million cases in 2030. 1) Diabetes mellitus is not only a well known as a metabolic disease characterized by hyperglycemia as the resulting from defects in insulin secretion and / or insulin action. 2) Diabetes Is also a associated with increased levels of sensitive marker of subclinical systemic inflammation. Several DM causes abnormalities of the immune system and it might result in higher risk as Urinary tract infection Infection (UTI) 3) Urinary tract infection (UTI) is one of the most common disease, and is a major cause of sepsis in hospitalized patients. 4) Glucose, leukocytes and bacteria in the urine finding in diabetes patients

Table 1. Table of frequency of sex and age.

Variable	Mean	Standard deviation	Median	N (%)
Age (years)	55,83	13,45	54	
Gender				
Male				13(43,3)
Female				17(56,7)
Blood sugar (GDS)	201,2	721,95	210	30
Glucosa urin	116,67	108.16	00	30
Lekosituri	278,43	721,95	47,90	30
Bakteri uri	2491,65	4655,26	189,10	30



Blood glucose (GDS) and urine Glucose | Blood glucose (GDS) and leucocyte

Figure 1. Regressi linier between blood glucose and urine glucose, leucocyte

METHODS

Research conducted at the hospital dr Kariadi Semarang in the period of October to December 2016. The target population is people with Type 2 diabetes regardless of ethnic differences. The samples studied were 30 people who have agreed to participation. This study aim was to find the, prevalence and the correlation between glucose, leukocyte and bacteria in the urine of diabetic patients . Cross -secrional design study was conducted on patients with DM. Among that 30 samples in the age of> 20 years, were taken blood and urine to be examined blood glucose, urine glucose, urine leukocyte and urine bacteriuria. Test were assessed using chemistry automatic analyzer and automatic analyzer. Spearman tests and regressi linier test were used to analyze the data, the p value of <0.05 was considered statistically significant, with the confidence interval of 95%.

RESULTS

The data of the basic characteristics of the 30 study subjects is shown in Table 1 The result is the basic characteristic of the study subjects with a mean age of 55.83, consists of men 13,3 (43,3%) and women 17(56 , 7%).

Results of the study in DM patients, with random blood glucose (GDS) was 11.67 ± 721.95, , whereas the mean urinary glucose levels was 116 ± 108.16, the mean leukocyte uri 278.43 ± 721.95; the average bacteriuri is 2491.65 ± 4655.26.

Results data, testing normality premises with Shapiro-Wilk test because the sample size of 30. Results scattered all data is not normal, statistical analysis used was Spearman Rho correlation analysis followed by linear regression analysis to analyze the relationship between GDS levels, urine glucose, lekosituri and bacteriuria at UTI 5) See Table 2.

Table 2. Descriptif dan Normality of Data

Variable	F (%)	Mean ± SD	Median (min – max)	P
Gender				
Male	13 (43,3)			
Female	17 (56,7)			
Age (years)		55,83 ± 13,46	54 (33 – 81)	0,408
GDS		201,2 ± 108,16	210 (50 – 460)	0,051
Glucose urin		116,67 ± 231,31	0 (0 – 1000)	0,000
Lekocyte		278,43 ± 721,95	47,9 (4,1 – 3723,4)	0,000
Bacteri		2491,7 ± 4655,3	189,1 (14,5 – 18468)	0,000

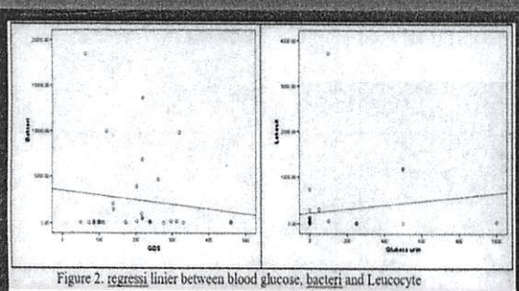


Figure 2. regressi linier between blood glucose, bacteri and Leucocyte

CONCLUSION AND SUGESTION

Based on this carefully results situations it can be concluded that with a 95% confidence interval, that there are a significant relationship between leucocyteuria, bacteriuria, glucoseuria and blood sugar in patients with DM.

There is a need to be investigated further with a different design and samples were divided into 3 groups with normal blood sugar group , prediabetic group, diabetic group. Normal patients, prediabetic, and diabetic, to be examined the risk of UTI.

REFERENCES :

1. Maiato RV, Gyawali P, Ryewali P, Rani PR, Regmi P, Simpli KP, et al. Association between glycaemic control and serum lipid profile in type 2 diabetic patients : Glycated haemoglobin as a dual biomarker. Biomedical Res. 2011;22(3): 375-380.
2. Gustavsson D.G, Agard C-D. Markers of inflation in patients with coronary artery disease are also associated with glycosylated hemoglobin A1c within the normal range. European Heart J. 2004;25: 2120-2124.
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Correlation Between Leukocyturia, Bacteriuria And Glucosuria In Diabetes Mellitus (DM) patients.

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Keywords: glucose, urinalysis, diabetes mellitus, leucocyturia, bacteriuria.

INTRODUCTION :

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METHODS:

Research conducted at the hospital dr. Kariadi Semarang in the period of October to December 2016. The target population is people with Type 2 diabetes regardless of ethnic differences. The samples studied were 30 people who have agreed to participation. This study aim was to find the prevalence and the correlation between glucose, leukocyte and bacteria in the urine of diabetic patients . Cross -secrional design study was conducted on patients with DM. Among that 30 samples in the age of> 20 years, were taken blood and urine to be examined blood glucose, urine glucose, urine leukocyte and urine bacteriuria. Test were assessed using chemistry automatic analyzer and automatic analyzer. Spearman tests and regressi linier test were used to analyze the data, the p value of <0.05 was considered statistically significant, with the confidence interval of 95%.

Benchmark equity includes patients with a diagnosis of type 2 diabetes by a clinicians. Random blood sugar levels were between 70-200 mg / dL . Patients agree and approved to participate in research; Fresh urine samples were collected and was not contaminated. Blood sugar take as a blood sugar on the spot. Patient is not included when: non-diabetic patients with kidney disease, patients with anemia, patients with a history of blood transfusion last 3 months, consumed antibiotics. Blood glucose tests and urinalysis examinations using the automatic analyzer and automatic urine chemistry analyzer.

RESULTS AND DISCUSSION:

The data of the basic characteristics of the 30 study subjects is shown in Table 1. The result is the basic characteristic of the study subjects with a mean age of 55.83, consists of men 13,3 (43.3%) and women 17(56 , 7%).

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Bakteri uri	2491,65	4655,26	189,10	30

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BLOOD GLUCOSE AND URINE GLUCOSE

Correlation between blood glucose and urine glucose ($p = 0.000$; $r = 0.717$), correlated were significant, strong positive. Diabetic patient usually controlled with principles based on examination of urinary glucose levels with dip strip or with automatic urine analysis. The usefulness of urinary glucose in the management of diabetes depents on its accuracy in the reflecting the blood glucose concentration. This correlation will be influenced by the urine volume, the renal threshold for glucose, and the peak blood glucose

levels between bladder reached voidings. These factors may alter from day-to -Day because of variations in the patient's activity, fluid intake, and general health, and qualitative change in the carbohydrate eaten. 6)

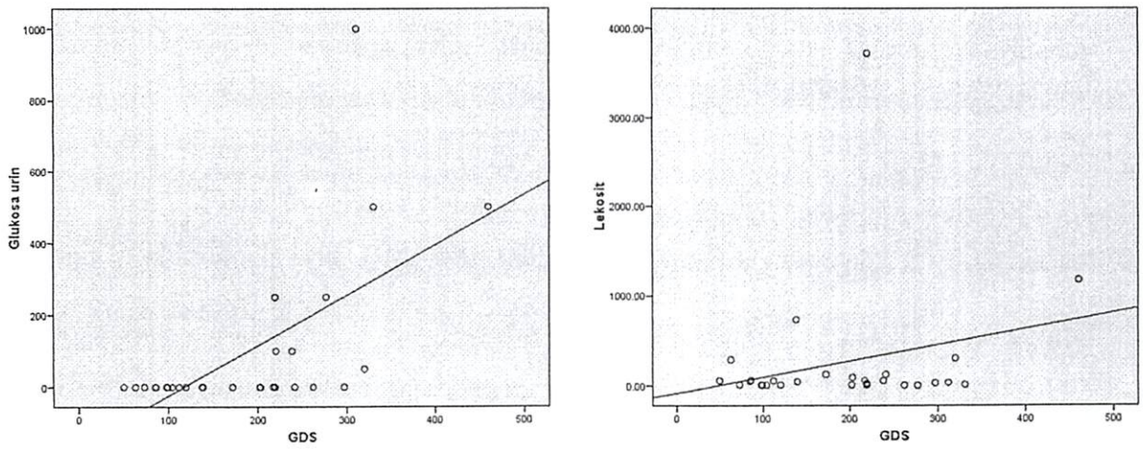

Figure 1. Regressi linier between blood glucose and urine glucose, leucocyte urine

BLOOD GLUCOSE AND LEUCOCYTE

Correlation between blood glucose(GDS) and leucocyte (p=0,393;r=0,162) shown not significant. Urinary tract infection (UTI) are more prevalent in diabetic patient and may evolve to complications and/or serious manifestations. The main risk factors for UTI in diabetic patient are : inadequate glycemic control, duration of Dm, diabetic microangopathy, Impaired leucocyte function, recurrent vaginitis, and anatomical and functional abnormalities of the urinary tract. (7). see. Fig1

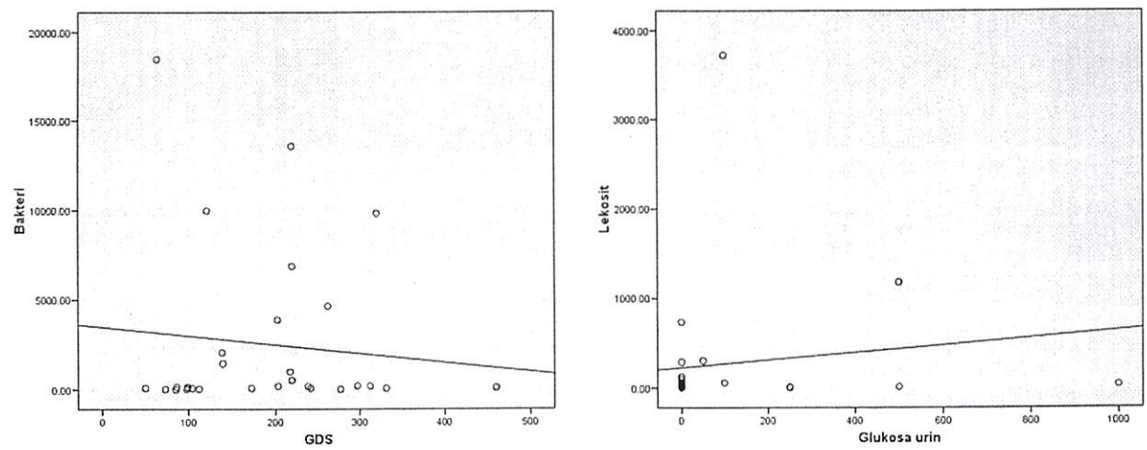

Figure 2. regressi linier between blood glucose, bacteriuri and Leukocyturi

BLOOD GLUCOSE AND BACTERIURIA

Correlation between blood glucose (GDS) and bacteri (p=0,527;r=0,120), shown not significant. Although women with Diabetes mellitus have greater prevalence of asymptomatic bacteria, the data on the natural history of this condition in women with DM are conflcting. Some studies reported progression to pyelonephritis. Whereas other suggested that this does not lead to serious complications. 8,9.acute pyelonephritis is 4-5 times more common in individuals with DM, with most infectioms are caused by Escherichia coli or Proteus Sp. 10) see fig.2

Tabel 3. Tabel Hasil Uji Korelasi Spearman's

Variable		P	R	Explanation
GDS	glucose urin	0,000	0,717	Signifikant, strong positive
	Lecocytece	0,393	0,162	Not significant
	Bacteri	0,527	0,120	Not signifikan
Glucose urin	Lecocyte	0,462	0,139	Not signifikan
	Bacteri	0,781	-0,053	Not signifikan
Leucocyte	Bacteri	0,376	0,168	Not signifikan

GLUCOSE URIN AND LEUCOCYTE

Correlation between glucose urin and leucocyte (p=0,462;r=0,139)were not significant. Diabetes affects many systems that protect against infection in general, and against urinary tract infections specifically. Poor circulation in diabetes reduces the ability of infection-fighting white blood cells to get where they need to go. When they do get there, they are less able to ingest the offending bacteria and kill them than normal white blood cells. Many people with dabetes also have dysfunctional bladders that contract poorly. This allows urine to remain in static pools for long periods of time, providing luxurous ponds for bacteria to grow in.11) see fig.2

GLUCOSE URIN AND BACTERIURI

Correlation between glucose urin and bacteri (p=0,781;r= - 0,053) were not significant. Women with diabetes are about two or three times more likely to have bacteria in their bladders than women without diabetes. Interestingly, the same does not appear to be true for men. There also seems to be an increased risk of the infectiom spreading upwards into the kidneys in diabetic patients,and diabetic women with urinary tract infections are also more likely to require hospitalization than non-diabetc women. 12) see fig.3

LEUCOCYTE URIN AND BACTERI URINE

Correlation between leucocyte urin dan bakteri urin (p= 0,376;r=0,168) were not significant. Lecocyturia (LU) is defined as the presence of leucocytes in urine. LU may be due to urinary infectiomns or non-infectious factors. Bacteriuria (BU) without LU can be countered especially in some conditions such as chronic renal failure, heart failure, and diabetes mellitus. LU associated with urinary tract infection (UTI) is considered to be significant when it is ≥ 10/mm3 in women, 5-10 ≥ leucocyte/in men. 13 kucukbayrak). Studies have shown that LU is predictive value for BU. BU is the presence of bacterium in urine in person without symptoms of urinary system. BU is significant is the presence of ≥ 10^5 cfu/ml of bacteria at mid-stream urine sample. BU is common in all age groups. However, it is more common in individuals with advanced age. 13) see fig.3

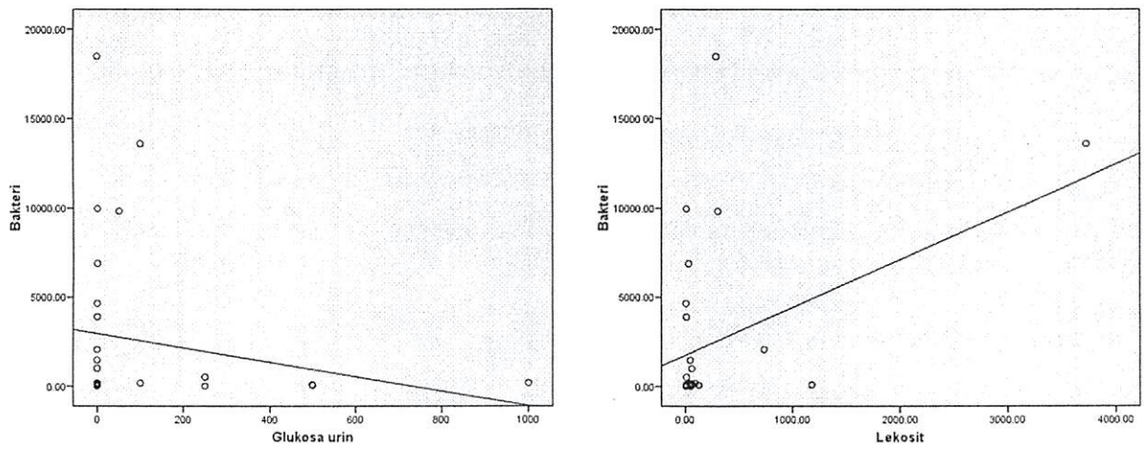

Fig.3.Regressi linier between glucose urin, Bacteriuri and leukocyturi

CONCLUSIONS AND SUGGESTIONS:

Based on this carefully results situations it can be concluded that with a 95% confidence interval, that there are a significant relationship between: 1) blood sugar and glucose urine in patients with DM. Rrelationship without significantcy exists between:

1)blood sugar and leucocyte uri; 2)blood sugar and bacteria uri; 3) glucose urin and lecocyt uri; 4) Glucose urine and bacteriuria; 5) bacteriuria and leucocyte uri.

Based on this situations, researchers believe there is a need to be investigated further with a different design, a large number of samples patients, and samples were divided into 3 groups with normal blood sugar group , prediabetic group, diabetic group. Normal patients, prediabetic, and diabetic, to be examined the risk of UTI. Thus will be seen clear whether there is any significance of diabetes and urinalysis or UTI.

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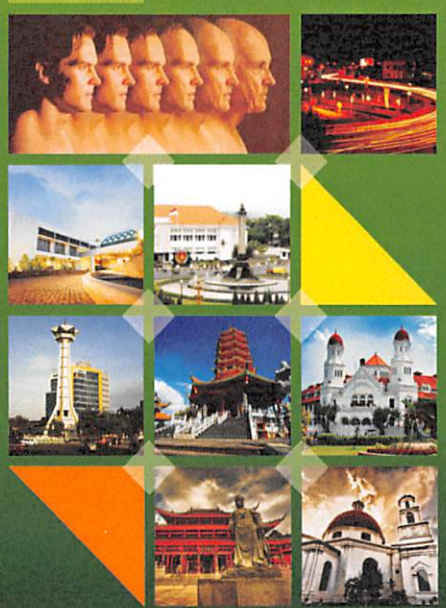

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CERTIFICATE

This is to certify that

Dr.dr.Indranila Kustarini Samsuria, Sp. PK (K)

As

~~ORAL~~ / POSTER PRESENTER

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