### **THESIS**

# THE CORRELATION BETWEEN TUBERCULOSIS MEDICATION AND BLOOD GLUCOSE LEVEL IN PATIENTS WITH TUBERCULOSIS AT KLATAK PUBLIC HEALTH CENTER BANYUWANGI 2023



### By : ADISTY ARCHI ARTAMEVIA PUTRI 201902001

### BACHELOR OF NURSING STUDY PROGRAM BANYUWANGI INSTITUTE OF HEALTH SCIENCES BANYUWANGI

2023

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## THE CORRELATION BETWEEN TUBERCULOSIS MEDICATION AND BLOOD GLUCOSE LEVEL IN PATIENTS WITH TUBERCULOSIS AT KLATAK PUBLIC HEALTH CENTER BANYUWANGI 2023

To Obtain a Bachelor of Nursing Degree (S. Kep) in the Nursing Study Program at Banyuwangi Institute of Health Sciences



By : ADISTY ARCHI ARTAMEVIA PUTRI

### BACHELOR OF NURSING STUDY PROGRAM BANYUWANGI INSTITUTE OF HEALTH SCIENCES BANYUWANGI

201902001

2023

### STATEMENT OF ORIGINALITY

This thesis is the result of my own scientific writing, and I do not engage in plagiarism in writing a thesis entitled:

"The Correlation between Tuberculosis Medication and Blood Glucose Level in Patients With Tuberculosis at Klatak Public Health Center Banyuwangi 2023"

If one day it is proven that I have committed plagiarism, I will accept the sanctions that have been determined.

This I make this statement letter truthfully.

Banyuwangi, September 2023

Statement Maker

ADISTY ARCHI ARTAMEVIA PUTRI 201902001

10795AKX437396219

### APPROVAL SHEET

### Thesis entitled:

The Correlation between Tuberculosis Medication and Blood Glucose Level in Patients With Tuberculosis at Klatak Public Health Center Banyuwangi 2023

### ADISTY ARCHI ARTAMEVIA PUTRI 201902001

Thesis has been approved

On September,

2023

By:

The First Advisor

Ns. Anita Dwi Ariyani, S.Kep., M.Kep

NIDN: 725118502

The Second Advisor

Ns. Masroni, S.Kep., M.S. (in Nursing)

NIDN: 709108605

The Head of Bachelor of Nursing Study Program

acel ilma

Ns Sholibin, S.Kep., M.Kep

NION: 723118302

### RATIFICATION OF THE EXAMINER

### Thesis entitled:

The Correlation between Tuberculosis Medication and Blood Glucose Level in Patients With Tuberculosis at Klatak Public Health Center Banyuwangi 2023

### Submitted by:

### ADISTY ARCHI ARTAMEVIA PUTRI 201902001

Has been accepted by the examiners team of the Bachelor of Nursing Study Program at Banyuwangi Institute of Health Sciences

On September, 2023

### **EXAMINERS TEAM**

The 1st Examiner :

Ns. Rudiyanto, S.Kep., M.Kep

The 2<sup>nd</sup> Examiner

Ns. Badrul Munif, S.Kep., M.Kep

The 3<sup>rd</sup> Examiner :

Ns. Anita Dwi Ariyani, S.Kep., M.Kep

The Chairman of

Banyuwangi Institute of Health Sciences

OEKARDJO

### **MOTTO**

"It is not for the sun to catch up with the moon, nor does the night outrun the day.

Each is travelling in an orbit of their own."

[QS. 36:40]

### STATEMENT OF APPROVAL THESIS PUBLICATION FOR ACADEMIC INTERESTS

The undersigned below:

NAME : ADISTY ARCHI ARTAMEVIA PUTRI

NIM : 201902001

Declaring truthfully that the results of my research are entitled:

"The Correlation between Tuberculosis Medication and Blood Glucose Level in Patients with Tuberculosis at Klatak Public Health Center Banyuwangi 2023"

Willing to be published in a magazine or scientific journal in the name of the advisor while still including my name as the researcher.

Banyuwangi, September 2023 Statement Maker

**Dinky** 

ADISTY ARCHI ARTAMEVIA PUTRI 201902001

### **PREFACE**

In the name of Allah, the beneficent and merciful. All praise is merely to the Mightiest Allah SWT, the lord of the worlds, for the gracious mercy and tremendous blessing that enabled me to accomplish this thesis. This thesis entitled "The Correlation between Tuberculosis Medication and Blood Glucose Level in Patients with Tuberculosis at Klatak Public Health Center Banyuwangi 2023" is submitted to fulfill one of the requirements in accomplishing the Bachelor of Nursing Degree at STIKES Banyuwangi.

There are many persons generously suggested to improve this thesis. First, the writer would like to express her sincere gratitude and respect.

- DR. H. Soekardjo, as chairman of STIKES Banyuwangi, provided the opportunity and facilities for me to attend and complete the Bachelor of Nursing Study education at STIKES Banyuwangi.
- Ns. Sholihin, M.Kep., Head of the Bachelor of Nursing Study Program and Ns. Rudiyanto, M.Kep., as the Class Advisor of the Bachelor of Nursing Study Program Class of 2019, who always provided support to complete this thesis.
- 3. The first advisor, Ns. Anita Dwi Ariyani, S.Kep., M.Kep, and the second advisor, Ns. Masroni, S.Kep., MS (in Nursing) who have contributed and given their valuable evaluations, comments, and suggestions during the accomplishing of this thesis.
- 4. Drg. Zelfia, as The Head of Klatak Public Health Center, has given permission and the opportunity to conduct the study at Klatak Public Health Center.

- 5. Mrs. Kurnia Ernawati, S.Kep, a Nurse in the Tuberculosis Section at Klatak Public Health Center, has provided opportunities, assistance, and advice when researchers conduct research.
- 6. My parents, Mr. Tamzis Bolivar, Mrs. Elies Wahyu, and my brother Dio Febry Yudhistira, who have given love and affection and also provided prayer and support, both moral and material, so this thesis can be resolved.
- 7. My cutie friends Ajeng Sri Rejeki, Aulia Amalia, Derisca Tiara, Eka Ainun Sabila, Failam Fanindita, Shinta Nuriyah, and all members of EOTW Group as supporters who always entertained and accompanied me in any condition.
- 8. Fellow students of the STIKES Banyuwangi from the Bachelor of Nursing Study Program AMAN of 2019 and all those who have assisted in this study that cannot be mentioned by researcher one by one.
- 9. Last but not least, thanks to myself for working hard and not giving up no matter how difficult the process of preparing this thesis from the beginning until now. It is an achievement that I should be proud of myself.

May the mightiest Allah SWT return the favor to all who have provided support, assistance, and opportunities to complete this thesis. The writer is fully aware that the writing of this thesis is still far from perfect, so the writer begs for constructive criticism and suggestions. The writer hopes this thesis can be useful generally for readers and the world of nursing.

Banyuwangi, September 2023 Writer



ADISTY ARCHI ARTAMEVIA PUTRI

### **ABSTRACT**

### THE CORRELATION BETWEEN TUBERCULOSIS MEDICATION AND BLOOD GLUCOSE LEVEL IN PATIENTS WITH TUBERCULOSIS AT KLATAK PUBLIC HEALTH BANYUWANGI 2023

### By:

### Adisty Archi Artamevia Putri Bachelor of Nursing Banyuwangi Institute of Health Sciences

Email: adistyarchi@gmail.com

Patients with tuberculosis have the possibility of increasing blood glucose levels. Tuberculosis medication is one of the most efficient efforts to cure tuberculosis bacteria. This study aimed to find The Correlation between Tuberculosis Medication and Blood Glucose Levels in Patients with Tuberculosis at Klatak Public Health Center Banyuwangi 2023.

This correlation study was with a Cross-Sectional research design. The sampling technique was Accidental Sampling with 44 respondents, research data instruments with observation sheet and glucometer test (On Call), and data analysis used Chi-Square test with SPSS version 21 for Windows.

The results of this study showed that most of the tuberculosis patients undergoing tuberculosis medication are currently in the Advanced Stage, with as many as 28 respondents (63.6%), and the glucose levels in tuberculosis patients at the Klatak Public Health Center are currently Normal as many as 24 respondents (54.5%). Chi-Square test analysis with a significance of 0.05 obtained a P value of 0.153, which means (P > 0.05) then H0 is accepted, meaning there is no correlation between tuberculosis medication and blood glucose level in tuberculosis patients at the Klatak Public Health Center Banyuwangi 2023.

Even though the results of this study state that there is no correlation between tuberculosis medication and blood glucose levels, the researchers hope that respondents will continue to behave in a healthy lifestyle to keep blood glucose levels stable. The research results can provide information for respondents and be a reference source for further research.

**Keywords:** Tuberculosis Medication, Blood Glucose Level, Tuberculosis.

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### LIST OF ABBREVIATIONS

AIDS : Acquired Immunodeficiency Syndrome

Am : Amikacin

Amx-Clv : Amoxicillin Clavulanate

Bdq : Bedaquiline

Cfz : Clofazimin

Cm : Capreomycin

Cs : Sikloserin

DC : Dendritic Cells

Dlm : Delamanid

DM : Diabetes Mellitus

DNA : Deoxyribonucleic Acid

E : Ethambutol

Eto : Etionamid

Gfx : Gatiflokasin

H : Isoniazid

HIV : Human Immunodeficiency Virus

INH : Isoniazid

Ipm : Inipenem-cilastatin

Km : Kanamycin

Lfx : Levofloksasin

LTBI : Latent Tuberculosis Infection

Lzd : Linezolid

MDR-TB : Multi Drug Resistant Tuberculosis

Mfx : Moksifloksasin

Mpm : Meropenem

MR TB : Mono-resistant Tuberculosis

NK : Natural Killer

PA-824 : Pretonamid

PAS : Para-aminosalicylic Acid

PERKENI : Perkumpulan Endokrinologi Indonesia

PR TB : Poly-resistant Tuberculosis

Pto : Protionamid

RNA : Ribonucleic Acid

QA : Quality Assurance

RR TB : Rifampicin Resistance Tuberculosis

S : Streptomycin

SOP : Standard Operational Procedure

T : Thioacetazone

TB : Tuberculosis

TC : Treatment Coverage

Trd : Terizidon

TSR : Treatment Success Rate

VEGF : Vascular Endothelial Growth Factor

WHO : World Health Organization

XDR TB : Extensive Drug Resistance

Z : Pyrazinamide

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