

THESIS
**THE EFFECTIVENESS OF FOOT REFLEXOLOGY USING A FOOT
REFLECTION BOARD AND BUERGER ALLEN EXERCISE ON
FOOT SENSITIVITY AMONG PATIENTS WITH DIABETES
MELLITUS IN THE SAWAH LEBAR PUBLIC
HEALTH CENTER WORKING AREA
BENGKULU CITY IN 2026**



Written By:

MIFTAH KAMILIA FADHILAH
NIM : P01720322025

**MINISTRY OF HEALTH OF THE REPUBLIC OF INDONESIA
BENGKULU HEALTH POLYTECHNIC MINISTRY OF
HEALTH DEPARTMENT OF NURSING BACHELOR
OF APPLIED NURSING STUDY PROGRAM
ACADEMIC YEAR 2025/2026**

THESIS TITLE SHEET

**THE EFFECTIVENESS OF FOOT REFLEXOLOGY USING A FOOT
REFLECTION BOARD AND BUERGER ALLEN EXERCISE ON
FOOT SENSITIVITY AMONG PATIENTS WITH DIABETES
MELLITUS IN THE SAWAH LEBAR PUBLIC
HEALTH CENTER WORKING AREA
BENGKULU CITY IN 2026**

Submitted in Partial Fulfillment of the Requirements for the Award of the
Bachelor of Applied Nursing Study Program Bengkulu Health
Polytechnic Ministry of Health of the Republic of Indonesia



Written By:

MIFTAH KAMILIA FADHILAH

Student ID : P01720322025

**MINISTRY OF HEALTH OF THE REPUBLIC OF INDONESIA
BENGKULU HEALTH POLYTECHNIC MINISTRY OF
HEALTH DEPARTMENT OF NURSING BACHELOR
OF APPLIED NURSING STUDY PROGRAM
ACADEMIC YEAR 2025/2026**

APPROVAL SHEET

**THE EFFECTIVENESS OF FOOT REFLEXOLOGY USING A FOOT
REFLECTION BOARD AND BUERGER ALLEN EXERCISE ON
FOOT SENSITIVITY AMONG PATIENTS WITH DIABETES
MELLITUS IN THE SAWAH LEBAR PUBLIC
HEALTH CENTER WORKING AREA
BENGKULU CITY IN 2026**

Written By:

MIFTAH KAMILIA FADHILAH

Student ID: P01720322025

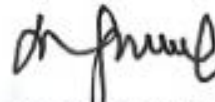
Thesis Has Been Examine by Examined Member of the Bachelor of Applied
Nursing Study Program, Department of Nursing Bengkulu Health
Polytechnic Ministry of Health of the Republic of Indonesia
Passed on June 30, 2026, With a Grade of 89,2

Chair of the Board of Examiners

Examiner I



Ns. Husni, S.Kep., M.Pd
NIP. 197412061997032001



Ns. Mardiani, S.Kep., MM
NIP. 197203211995032001

Examiner II

Examiner III



Ns. Septiyanti, S.Kep., M.Pd
NIP. 197409161997032001



Widia Lestari S.Kep., M.Sc
NIP. 198106052005012004

Accepted and Approved in Partial of the Requirements for
the Degree of Bachelor of Applied Nursing

Acknowledge by:

Head of the Bachelor of Applied Nursing Study Program Bengkulu Health
Polytechnic Ministry of Health of The Republic of Indonesia



Ns. Hendri Heriyanto, S.Kep., M.Kep
NIP. 198205152002121004

ORIGINALITY STATEMENT

The Undersigned :

Name : Miftah Kamilia Fadhilah
Student ID : P01720322025
Thesis Title : The Effectiveness of Foot Reflexology Using a Foot Reflection Board and Buerger Allen Exercise on Foot Sensitivity Among Patients with Diabetes Mellitus in The Sawah Lebar Public Health Center Working Area Bengkulu City in 2026

I hereby declare that this thesis is my own original work. The content of this thesis has not been submitted, either in whole or in part, by any other person for the purpose of obtaining an academic degree or qualification at any higher education institution. To the best of my knowledge and belief, this thesis contains no material previously written or published by another person without proper acknowledgment. Where the ideas, findings, or words of others have been used, they have been appropriately cited and referenced in accordance with accepted academic standards.

I make this statement in truth and honesty. Should this thesis subsequently be found to contain any form of plagiarism, I am willing to accept all consequences and assume full responsibility in accordance with the applicable regulations.

Bengkulu, Juni 19, 2026

Declared by



Miftah Kamilia Fadhilah
Student ID. P01720322025

BIOGRAPHY



Name : Miftah Kamilia Fadhillah

Place and Date of Birth : Sambirejo, February 14, 2005

Religion : Islam

Gender : Female

Order of Birth : 1 (One)

Educational Background : 1. TK Kartika II – 21 (2009-2010)
2. SD Negeri 14 Selupu Rejang (2010-2016)
3. SMP Negeri 13 Rejang Lebong (2016-2019)
4. SMA Negeri 02 Rejang Lebong (2019-2022)

Address : Desa Sambirejo, Kecamatan Selupu Rejang,
Kabupaten Rejang Lebong, Provinsi Bengkulu

Study Program : Bachelor of Applied Nursing

Institution : Bengkulu Health Polytechnic Ministry of Health

Year of Admission : 2022

Email : miftahkamilia14@gmail.com

MOTTO AND DEDICATION

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

“In the name of Allah, the Most Compassionate, the Most Merciful”

MOTTO:

“Once you make a decision, universe conspires to make it happen, just keep your intentions pure”

DEEDICATION:

Alhamdulillahirabbil'alamin, as this long journey comes to an end with the successful completion of this undergraduate thesis, I humbly and sincerely dedicate this work to:

1. All praise is due to Allah SWT, the One and Only God, for His endless mercy, guidance, and strength that have accompanied every step of His servant. This work is a humble expression of my gratitude for the countless blessings, patience, and support He has bestowed upon me, enabling me to complete this undergraduate thesis successfully.
2. Prophet Muhammad (peace be upon him), the beloved Messenger of Allah, whose name brings peace to the heart and whose exemplary life has served as a moral compass, guiding humanity from the darkness of ignorance to the light of knowledge.
3. To the extraordinary woman who brought me into this world, the light of my life whose love knows no bounds, my beloved mother (Mrs. N). You have always been my greatest source of love, strength, and unwavering prayers throughout every stage of my life. Thank you for your endless love, sacrifices, and confidence in me, especially during the moments when I doubted myself. This undergraduate thesis would never have been possible without your blessings, prayers, and unwavering support. I dedicate this humble work to you as a heartfelt expression of my deepest gratitude and as a small testament that every sacrifice you have made has never been in vain. I love you, Mom.
4. To my father (Mr. S), the first love of his first daughter. Thank you for your hard work, unwavering support, and every sacrifice you have made to

enable me to pursue my education this far. Although life's journey has not always allowed us to be together, I remain grateful to have a father who has always strived to give me the very best. I dedicate this humble work to you as a heartfelt expression of my gratitude and pride in being your daughter. I hope to continue making you proud. Thank you, Dad.

5. To Ayah I and Bunda Y, my unexpected second parents. Our first meeting may have begun under rather awkward circumstances, but having you in my life has been a blessing that I am deeply grateful for. Thank you for your sincerity, your wholehearted acceptance, and the unconditional love and care you have given me without ever making me feel different. I dedicate this humble work to both of you with my deepest respect, gratitude, and appreciation.
6. I would like to express my deepest respect and heartfelt gratitude to my two exceptional supervisors, Mrs. Ns. Septiyanti, S.Kep., M.Pd, and Mrs. Widia Lestari, S.Kep., M.Sc. Completing this undergraduate thesis was by no means an easy journey, but your invaluable guidance, wisdom, and encouragement transformed it into a truly meaningful learning experience. Thank you for your unwavering support, thoughtful mentorship, and patience from the very beginning until the completion of this work, especially for guiding me through every moment of uncertainty. This humble work would never have been completed without your knowledge, patience, guidance, and sincere support.
7. To my examiners, Mrs. Ns. Husni, S.Kep., M.Pd. and Mrs. Ns. Mardiani, S.Kep., MM., I express my deepest respect and gratitude. The trial process is not an easy thing, but it is a valuable learning experience thanks to the direction and input from all of you. Thank you for every criticism, correction, and constructive suggestion for the improvement of this thesis, as well as for the decision given at the end of my session.
8. To my dear siblings, Nisa and Atan. Thank you for being the best *support system* at home, tired reliever, and the most loyal entertainer. Thank you for your prayers, jokes, and simple attention. The success of this thesis cannot

be separated from your presence, and I hope that this success can be transmitted to your future later. Always get along!

9. To someone who is walking this journey alongside me. Thank you for always believing in me, for being my constant source of support, and for giving me a place of comfort whenever I felt exhausted. Thank you for listening with patience, lifting me up in moments of doubt, and reminding me that I was capable of reaching this milestone. Now, one chapter has come to an end. Beyond the completion of this journey, there is a quiet prayer that I have entrusted to the heavens that your name may be part of the best destiny written for me. Yet, if life leads us down different paths, I will always be grateful that we once found healing in one another, gave each other strength, and became one of the most meaningful chapters in each other's lives.
10. For Keke and Tiara, best friends since high school. Thank you for being the most beautiful part of the white and gray period until now. From ordinary classmates, we grew close and walked together until we finally stood in each other's paths. Thank you for every story, support, and patience you have listened to my complaints and always give encouragement and confidence. You are not only friends, but you are like family. May the new step forward bring good to all of us.
11. For comrades in battle from the beginning of the lecture until the end (Etik, Nesa, Bila, Nanda, and Rama). Thank you for being at the forefront since the first semester, as well as for the unwavering togetherness, help, and enthusiasm during this journey. Your presence, laughter, and support make this long process feel easier. I am very grateful to be able to process and complete this round with you. Thank you for everything, *we finally made it!*
12. For extraordinary humans with all their magical behaviors (Nadea, Tari, Raisha, Zahirah, Ivo, and Mela). Thank you for being the best part of the story during the lecture period. Thank you for every laugh in between lectures, group discussions, help, and encouragement that you always give

in the most tiring moments. Your presence makes this lecture trip feel lighter and more enjoyable. *Thank you for everything!*

13. Special to my beautiful cousins (Mbak Ani, Tina and Chika). Thank you for accompanying my journey with great laughter, stories, and support until I got to this point. Love you so much!
14. To all the good people who have colored my life journey without exception. Thank you for all the support, enthusiasm, and togetherness that you have shared so far. Although not all names can be written on this sheet, know that every story and kindness of yours will always be neatly stored in my memory and gratitude. *Thank you!*
15. To the feet that never stopped moving forward, the heart that remained resilient even after it had been broken, and to myself for finding the strength to turn every tear into a smile. Thank you for choosing not to give up, even when this journey felt overwhelmingly difficult. There were countless quiet nights, moments of self-doubt, and tears along the way, yet you persevered and proved that you were stronger than your fears. Thank you for holding on to this dream until it finally became a reality. May the knowledge earned through perseverance and dedication become more than an academic achievement, serving instead as a source of benefit and goodness in every step that lies ahead. This accomplishment is not the end of the journey, but the beginning of an even greater one. I am incredibly proud of you, self!

“Allahumma yassir wala tu’assir”
(O Allah, make it easy and do not make it difficult)

“Beyond every storm, there is always a rainbow”
- Ghea Indrawati -

“In the end, this is only the beginning”
- Nadin Amizah -

“Our light is not defined by where we stand, but by our courage to grow into our best selves. Even the narrowest space holds enough room to bloom and shine”

FOREWORD

All praise and gratitude are prayed to God Almighty for His abundant blessings and grace, allowing the author to complete the writing of this thesis entitled “The Effectiveness of Foot Reflexology Using a Foot Reflection Board and Buerger Allen Exercise on Foot Sensitivity Among Patients with Diabetes Mellitus in The Sawah Lebar Public Health Center Working Area Bengkulu City in 2026”. The purpose of this thesis is to determine the effectiveness of Foot Reflexology using a Foot Reflection Board and Buerger Allen Exercise on foot sensitivity among patients with DM. Furthermore, this thesis was written as one of the requirements to achieve the degree of Applied Bachelor's in Nursing.

In the process of writing this thesis, the author received various forms of support, both material and moral, from numerous parties. Therefore, the author would like to express the deepest gratitude and highest appreciation to:

1. Mrs. Linda, SST., M.Kes, Director of Bengkulu Health Polytechnic, Ministry of Health.
2. Mrs. Ns. Erni Buston, SST., M.Kes, Head of the Department of Nursing, Bengkulu Health Polytechnic, Ministry of Health.
3. Mr. Ns. Hendri Heriyanto, S.Kep., M.Kep, Head of the Bachelor of Applied Nursing Study Program, Bengkulu Health Polytechnic, Ministry of Health.
4. Mrs. Ns. Septiyanti, S.Kep., M.Pd, as Deputy Director I of the Health Polytechnic of the Ministry of Health of Bengkulu as well as supervisor I who has spent time and energy and thoughts to provide guidance and direction with patience to the author in compiling this thesis.
5. Mrs. Widia Lestari, S.Kep., M.Sc, as a Supervisor II who with sincerity and patience has provided very valuable guidance, input, and direction to the author in compiling this thesis.
6. Mrs. Ns. Husni, S.Kep., M.Pd, as the Chair of the Board of Examiners who has provided a lot of input, direction, and correction for the perfection of this thesis.

7. Mrs. Ns. Mardiani, S.Kep., MM, as Examiner I who has taken the time to test, guide, and provide very constructive criticism and suggestions in the preparation of this thesis.
8. All lecturers and educational staff of the Department of Nursing, Bengkulu Health Polytechnic, Ministry of Health, who have patiently guided, taught, and supported the author during the lecture period until the completion of this thesis.
9. All individuals who have contributed, directly or indirectly, to the completion of this thesis, but whose names cannot be mentioned individually.

The author realizes that this thesis is not without limitations and imperfections due to the author's limited knowledge, experience, and capabilities. Therefore, the author sincerely welcomes constructive comments and suggestions from all parties to improve the quality of future academic work. May every comment and suggestion offered be rewarded by Almighty God.

The author sincerely hopes that this undergraduate thesis will provide meaningful contributions to readers, particularly to the author and future students of the Department of Nursing.

Bengkulu, Juni 19, 2026
The Author,

Miftah Kamilia Fadhilah
Student ID. P01720322025

**THE EFFECTIVENESS OF FOOT REFLEXOLOGY USING A FOOT
REFLECTION BOARD AND BUERGER ALLEN EXERCISE ON
FOOT SENSITIVITY AMONG PATIENTS WITH DIABETES
MELLITUS IN THE SAWAH LEBAR PUBLIC
HEALTH CENTER WORKING AREA
BENGKULU CITY IN 2026**

Miftah Kamilia Fadhilah¹, Septiyanti², Widia Lestari³

¹*Student of Applied Bachelor of Nursing Study Program, Health Polytechnic
Bengkulu, Bengkulu Indonesia*

^{2,3}*Department of Nursing, Health Polytechnic Bengkulu, Bengkulu Indonesia*
Email : miftahkamilia14@gmail.com

ABSTRACT

Diabetic Peripheral Neuropathy (DPN) reduces plantar sensitivity and elevates the risk of diabetic foot ulcers. Non-pharmacological interventions such as Foot Reflexology via a Foot Reflection Board (FRB) and Buerger Allen Exercise (BAE) are intended to optimize blood perfusion and nerve functions. This study aimed to determine and compare the effectiveness of Foot Reflexology using an FRB versus BAE on increasing foot sensitivity among patients with DM. A quasi-experimental study with a pre-post test two-group design was conducted on 60 diabetic participants selected via purposive sampling. The samples were divided equally into the FRB group (n = 30) and the BAE group (n = 30). The treatment for both groups was conducted three times a week for one month. Foot sensitivity was measured before and after the treatment using the 10g Semmes-Weinstein Monofilament Test (SWMT). The delta scores were analyzed using the Mann-Whitney U test. Post-intervention data showed an increase in mean sensitivity scores for both groups. However, the Mann-Whitney U test on the delta sensitivity scores showed a significant difference between the two groups, with a p-value of 0.006 for the right foot and a p-value of 0.032 for the left foot ($p \leq 0.05$). Foot Reflexology using a Foot Reflection Board is significantly more effective in increasing foot sensitivity among patients with DM compared to the Buerger Allen Exercise.

Kata Kunci: Buerger Allen Exercise; Diabetes Mellitus; Foot Reflexology; Foot Reflection Board; Foot Sensitivity

**EFEKTIVITAS FOOT REFLEXOLOGY DENGAN ALAT FOOT
REFLECTION BOARD DAN BUERGER ALLEN EXERCISE
TERHADAP SENSITIVITAS KAKI PADA PENYANDANG
DIABETES MELITUS DI WILAYAH KERJA
PUSKESMAS SAWAH LEBAR KOTA
BENGKULU TAHUN 2026**

Miftah Kamilia Fadhilah¹, Septiyanti², Widia Lestari³

¹*Mahasiswa Prodi Sarjana Terapan Keperawatan Poltekkes Kemenkes Bengkulu,
Bengkulu Indonesia*

^{2,3}*Dosen Jurusan Keperawatan Poltekkes Kemenkes Bengkulu, Bengkulu
Indonesia*

Email : miftahkamilia14@gmail.com

ABSTRAK

Diabetic Peripheral Neuropathy (DPN) menyebabkan penurunan sensitivitas plantar dan meningkatkan risiko terjadinya ulkus kaki diabetik. Intervensi nonfarmakologis seperti Foot Reflexology dengan alat Foot Reflection Board (FRB) dan Buerger Allen Exercise (BAE) bertujuan untuk mengoptimalkan perfusi darah dan fungsi saraf. Penelitian ini bertujuan untuk mengetahui serta membandingkan efektivitas Foot Reflexology dengan alat Foot Reflection Board dengan Buerger Allen Exercise terhadap peningkatan sensitivitas kaki pada penyandang DM. Penelitian ini menggunakan desain quasi-experimental dengan rancangan pre-post test two-group design. Sebanyak 60 penyandang DM dipilih menggunakan teknik purposive sampling dan dibagi secara seimbang ke dalam kelompok FRB (n = 30) dan kelompok BAE (n = 30). Intervensi pada kedua kelompok diberikan sebanyak tiga kali dalam seminggu selama satu bulan. Sensitivitas kaki diukur sebelum dan sesudah intervensi menggunakan Semmes-Weinstein Monofilament Test (SWMT) 10 gram. Analisis terhadap selisih (delta) skor sensitivitas dilakukan menggunakan uji Mann-Whitney U. Hasil penelitian menunjukkan adanya peningkatan rerata skor sensitivitas kaki pada kedua kelompok setelah intervensi. Hasil uji Mann-Whitney U terhadap nilai delta sensitivitas menunjukkan perbedaan yang bermakna antara kedua kelompok, dengan nilai $p = 0,006$ pada kaki kanan dan $p = 0,032$ pada kaki kiri ($p \leq 0,05$). Foot Reflexology dengan alat Foot Reflection Board terbukti lebih efektif secara signifikan dalam meningkatkan sensitivitas kaki pada penyandang DM dibandingkan dengan Buerger Allen Exercise.

Keywords: *Buerger Allen Exercise; Diabetes Melitus; Foot Reflexology; Foot Reflection Board; Sensitivitas Kaki*

TABLE OF CONTENTS

THESIS TITLE SHEET	i
APPROVAL SHEET	ii
ORIGINALITY STATEMENT.....	iii
BIOGRAPHY	iv
MOTTO AND DEDICATION	v
FOREWORD.....	ix
ABSTRACT	xi
ABSTRAK	xi
TABLE OF CONTENTS	xiii
LIST OF TABLES.....	xv
LIST OF FIGURES	xvi
LIST OF CHART	xvii
LIST OF APPENDICES.....	xviii
LIST OF ABBREVIATIONS	xix
 CHAPTER I INTRODUCTION	
A. Background	1
B. Research Problem.....	6
C. Research Objective.....	6
D. Significance of The Research.....	7
 CHAPTER II LITERATURE REVIEW	
A. Theoretical Concept of Diabetes Mellitus (DM)	8
B. Concept of Foot Sensitivity.....	14
C. Concept of Foot Reflexology using a Foot Reflection Board...	20
D. Buerger Allen Exercise Concept	24
E. The Effectiveness of Foot Reflexology using a Foot Reflection Board and Buerger Allen Exercise on Foot Sensitivity in People with DM	27
F. Theoretical Framework	29

CHAPTER III CONCEPTUAL FRAMEWORK, RESEARCH HYPOTHESIS AND OPERATIONAL DEFINITIONS

A. Conceptual Framework	30
B. Operational Definitions	31
C. Research Hypothesis	32

CHAPTER IV RESEARCH METHODOLOGY

A. Type of Research and Research Design	33
B. Research Variables	34
C. Research Location and Time	34
D. Population and Sample	34
E. Data Collection	37
F. Data Processing	39
G. Data Analysis	40
H. Research Flowchart	42
I. Research Ethics	43
J. Research Schedule	44

CHAPTER V RESEARCH RESULTS

A. Research Process	46
B. Univariate Analysis	49
C. Bivariate Analysis	52

CHAPTER VI DISCUSSION

A. Interpretation and Discussion of Findings	55
B. Research Limitations	65

CHAPTER VII CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions	67
B. Recommendations	68

BIBLIOGRAPHY

APPENDICES

LIST OF TABLES

Table 2. 1	Diagnostic Criteria for DM.....	13
Table 3. 1	Operational Definition	31
Table 4. 1	Research Schedule	44
Table 5. 1	Frequency Distribution of Characteristics of DM Patients with Decreased Foot Sensitivity in the Sawah Lebar Health Center Working Area, Bengkulu City, 2026 (n = 60)	49
Table 5. 2	Average Distribution of Foot Sensitivity Before and After Foot Reflexology and Buerger Allen Exercise in the Sawah Lebar Health Center Working Area, Bengkulu City, 2026 (n = 60)	51
Table 5. 3	Normality Test Results for Foot Reflexology and Buerger Allen Exercise in the Sawah Lebar Health Center Working Area, Bengkulu City, 2026 (n = 60).....	52
Table 5. 4	Difference in Foot Sensitivity Improvement Between Foot Reflexology and Buerger Allen Exercises in DM Patients, Sawah Lebar Health Center, Bengkulu City, 2026	53



LIST OF FIGURES

Figure 2. 1 Monofilament test uses	19
Figure 2. 2 Palm Seed Insole tool innovations.....	21
Figure 2. 3 Points associated with symptoms of foot neuropathy.....	22
Figure 2. 4 15 reflection points on the soles of the foot.....	22
Figure 2. 5 Elevation stage 45-90°	26
Figure 2. 6 Stage of descent by flexion, extension, pronation and supination...	26
Figure 2. 7 Horizontal or resting stage	26



LIST OF CHART

Chart 2. 1 Theoretical framework.....	29
Chart 3. 1 Concept Framework.....	30
Chart 4. 1 Research design	33
Chart 4. 2 Research Flowchart.....	42



LIST OF APPENDICES

- Appendix 1** Inform consent and research explanation
- Appendix 2** Application letter to become a participant
- Appendix 3** Statement of willingness to become a participant
- Appendix 4** Identity questionnaire sheets
- Appendix 5** SOP Monofilament Test
- Appendix 6** SOP Foot Reflexology using a Foot Reflection Board
- Appendix 7** SOP Buerger Allen Exercise
- Appendix 8** Master Table
- Appendix 9** SPSS Output Analysis Results
- Appendix 10** Research documentation
- Appendix 11** Pre-research cover letter to the Sawah Lebar Health Center of Bengkulu City
- Appendix 12** Pre-research cover letter to the Bengkulu City Health Office
- Appendix 13** Pre-research recommendation letter of the Bengkulu City Health Office
- Appendix 14** Pre-research letter of the Sawah Lebar Health Center of Bengkulu City
- Appendix 15** Certificate of feasibility of research ethics
- Appendix 16** Letter of introduction for research permit to the Bengkulu City KESBANGPOL Office
- Appendix 17** Cover letter for research permit to the Bengkulu City Health Office
- Appendix 18** Letter of introduction for research permit to the Sawah Lebar Health Center, Bengkulu City
- Appendix 19** Letter of introduction for research permit to the Sawah Lebar Health Center, Bengkulu City
- Appendix 20** Research recommendation letter of the Bengkulu City Health Office
- Appendix 21** Research permit for the Bengkulu City Sawah Lebar Health Center
- Appendix 22** Research completion of the Sawah Lebar Health Center in Bengkulu City
- Appendix 23** Similarity check results
- Appendix 24** Foot reflexology training certificate
- Appendix 25** ACC sheets of research title
- Appendix 26** Thesis guidance consul sheets

LIST OF ABBREVIATIONS

ADA	: American Diabetes Association
AGEs	: Advanced Glycation End Products
ASCVD	: Atherosclerotic Screening Cardio Vascular Disease
BAE	: Buerger Allen Exercise
BMI	: Body Mass Index
CI	: Confidence Interval
CGRP	: Calcitonin Gene Related Peptide
DCCT	: Diabetes Control and Complication Trial
DM	: Diabetes Mellitus
DKA	: Diabetic Ketoacidosis
DPN	: Diabetic Peripheral Neuropathy
ESRD	: End Stage Renal Disease
FPG	: Fasting Plasma Glucose
FRB	: Foot Reflection Board
GDM	: Gestational Diabetes Mellitus
HHS	: Hiperglikemik Hiperosmolar
IDF	: International Diabetes Federation
LEP	: Lower Extremity Perfusion
LOPS	: Loss Of Protective Sensation
LOA	: Letter Of Acceptance
NGSP	: National Glycohaemaglobin Standarization Program
PCOS	: Polycystic Ovary Syndrome
PERKENI	: Perkumpulan Endokrinologi Indonesia
PPV	: Positive Predictive Value
RBG	: Random Blood Glucose
SKI	: Survei Kesehatan Indonesia
SOP	: Standard Operating Procedures
SP	: Substansi P
SWMT	: Semmes Weinstein Monofilament Test
T1DM	: Type 1 Diabetes Mellitus
T2DM	: Type 2 Diabetes Mellitus
TTGO	: Tes Toleransi Glukosa Oral
WHO	: World Health Organization
2hPPBG	: 2-Hour Postprandial Blood Glucose