

**THESIS**

**EVALUATION OF INSULIN ADHERENCE ON A DIABETES  
OUTPATIENT AT DR. MOEWARDI HOSPITAL SURAKARTA**



**Compiled by:**

**Baiq Mira Syifa Khairunnisa  
NIM 422021718022**

**UNIDA  
GONTOR  
PHARMACY STUDY PROGRAM  
FACULTY OF HEALTH SCIENCES  
UNIVERSITY OF DARUSSALAM GONTOR  
PONOROGO  
UNIVERSITAS DARUSSALAM GONTOR  
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## VALIDITY SHEET

### VALIDITY SHEET THESIS EXAM

It is hereby stated that the thesis with the title :

#### EVALUATION OF INSULIN ADHERENCE ON A DIABETES OUTPATIENT AT DR. MOEWARDI HOSPITAL SURAKARTA

Written by:

Baiq Mira Syifa Khairunnisa  
422021718022

Has been tested and approved & before the Thesis Examiner Board

On : .....

Examiner Board :

Mentor 1

apt. Satwika Budi Sawitri, M.Farm  
NIDN. 0721118402

Mentor 2

apt. Amal Fadholah, S.Si, M.Si  
NIDN. 0510017002

Examiner 1

Apt. Nadia Iha Fatihah, M.Clin.Pharm  
NIY. 0714059105

Approved by,  
Head of Pharmacy Study Program

apt. Nadia Iha Fatihah, M.Clin.Pharm.  
NIDN. 0714059105

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## ABSTRAK

### EVALUASI KEPATUHAN PASIEN RAWAT JALAN DALAM PENGGUNAAN INSULIN PADA KASUS DIABETES MELLITUS DI RSUD Dr. MOEWARDI SURAKARTA

**Baiq Mira Syifa Khairunnisa**

**NIM 422021718022**

Diabetes Mellitus (DM) adalah penyakit kronis yang memerlukan terapi insulin jangka panjang untuk mengontrol kadar glukosa darah. Pada tahun 2019, jumlah penderita DM di Indonesia mencapai 10,17 juta dan diperkirakan meningkat hingga 16,6 juta pada tahun 2045. Ketidakpatuhan terhadap penggunaan insulin dapat menyebabkan komplikasi serius. Penelitian ini bertujuan untuk mengevaluasi tingkat kepatuhan pasien rawat jalan terhadap penggunaan insulin di RSUD Dr. Moewardi Surakarta serta hubungan faktor sosiodemografi dan pencapaian *outcome klinis*. Desain penelitian ini menggunakan pendekatan observasional analitik dengan metode cross-sectional. Data diperoleh melalui kuesioner *Morisky Medication Adherence Scale-8* (MMAS-8) dan rekam medis pasien. Sebanyak 43 pasien diabetes mellitus dilibatkan dalam penelitian ini. Hasil penelitian menunjukkan bahwa 74,42% pasien patuh dalam menggunakan insulin, sedangkan 25,58% tidak patuh. Tidak ditemukan hubungan yang signifikan antara faktor sosiodemografi (jenis kelamin, usia, pendidikan, pekerjaan, dukungan keluarga, dan lama sakit) dengan tingkat kepatuhan pasien ( $p>0,05$ ). Outcome klinis yang diukur melalui target HbA1c (<7%) dan GDP (<130 mg/dL) juga tidak menunjukkan hubungan yang signifikan dengan kepatuhan penggunaan insulin ( $p>0,05$ ). Hanya 28,1% pasien patuh yang mencapai target HbA1c dan 21,9% yang mencapai target GDP. Kesimpulannya, meskipun sebagian besar pasien patuh dalam penggunaan insulin, pencapaian target klinis tidak selalu tercapai karena dipengaruhi oleh faktor lain seperti pola makan dan gaya hidup.

**Kata kunci:** Diabetes Mellitus, Insulin, Kepatuhan, Kuesioner

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## **ABSTRACT**

### **EVALUATION OF INSULIN ADHERENCE ON A DIABETES OUTPATIENT AT DR. MOEWARDI HOSPITAL SURAKARTA**

**Baiq Mira Syifa Khairunnisa**

**NIM 422021718022**

Diabetes mellitus (DM) is a chronic disease that requires long-term insulin therapy to control blood glucose levels. In 2019, 10,17 million people in Indonesia suffered from Diabetes Mellitus (DM), with an expected increase to 6,6 million by 2045. Non-compliance with the use of insulin can lead to serious complications. This study aimed to evaluate insulin adherence among outpatients at Dr. Moewardi Surakarta Hospital and explore the relationship between sociodemographic factors and clinical outcomes. A cross-sectional design was employed, utilizing the Morisky Medication Adherence Scale-8 (MMAS-8) and patient medical records. A total of 43 patients with diabetes mellitus participated. The findings revealed that 74.42% of patients were compliant with insulin use, while 25.58% were non-compliant. There was no significant relationship between sociodemographic factors (gender, age, education, occupation, family support, and length of illness) and patient adherence ( $p > 0.05$ ). Clinical outcomes measured through HbA1c (<7%) and GDP (<130 mg/dL) targets also did not show a significant association with insulin adherence ( $p > 0.05$ ). Only 28.1% of compliant patients achieved the HbA1c target, and 21.9% achieved the GDP target. Although a majority of patients demonstrated insulin adherence, achieving clinical targets was not always realized, suggesting that factors beyond adherence, such as diet and lifestyle, play a significant role in overall glycemic control.

**Keywords:** Diabetes Mellitus, Insulin, Compliance, Questionnaire

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I acknowledge that this thesis is far from perfect, as my knowledge, experience, and abilities are limited. Therefore, I welcome any constructive criticism and suggestions that can help me improve future works.

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Author

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