

THESIS

EFFECTIVENESS OF SELF-MANAGEMENT OF DIABETES ON SELF-EMPOWERMENT IN PATIENTS WITH TYPE 2 DIABETES MELLITUS

SYSTEMATIC REVIEW



**RIFKY OCTAVIA PRADIPTA
ID. 131914153056**

**MASTER IN NURSING STUDY PROGRAM
FACULTY OF NURSING
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SURABAYA
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COVER SHEET

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THESIS SYSTEMATIC REVIEW

To Obtain the Title of Master of Nursing (M. Kep.) in Master in Nursing Study Program, Faculty of Nursing, Universitas Airlangga



**By:
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SURABAYA
2020**

STATEMENT OF ORIGINALITY

This thesis is based on my original research and using citations and references from selected and current resources.

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Date : November, 5th 2020

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on November 5th 2020

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This thesis has been examined and granted by committee of examiners in Master in Nursing Study Program, Faculty of Nursing, Universitas Airlangga on November 2020

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PREFACE

Praise and gratitude are always offered to Allah SWT, thanks to His grace and guidance, a systematic review entitled "The Effectiveness of Self-Management of Diabetes on Self-Empowerment in Patients with Type 2 Diabetes Mellitus" can be resolved. Hereby express my deepest gratitude with a sincere heart to:

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Surabaya, May 26th 2020

Rifky Octavia Pradipta

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**APPROVAL SHEET OF THESIS PUBLICATION FOR ACADEMIC
INTEREST**

As a Universitas Airlangga Academic Community, I signed below:

Name : Rifky Octavia Pradipta
ID : 131914153056
Study Program : Master's Degree of Nursing
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Faculty : Faculty of Nursing
Type of Creation : Thesis

For the development of science, agreed to provide to the Universitas Airlangga **Non-Exclusive Royalty-Free Right** on my scientific work entitled: **“Effectiveness of Self-Management of Diabetes on Self-Empowerment in Patients with Type 2 Diabetes Mellitus”** along with existing devices (if needed). With **Non-Exclusive Royalty-Free Right**, Universitas Airlangga keep media/format, manage natural form of databases, maintain, and publish my final thesis for fixed list my name as author/creator's as the owner of copyright along with supervisors.

So, this is my statement for the truth,

Made in : Surabaya

Date : May 26, 2020



Rifky Octavia Pradipta

SUMMARY

EFFECTIVENESS OF SELF-MANAGEMENT OF DIABETES ON SELF-EMPOWERMENT IN PATIENTS WITH TYPE 2 DIABETES MELLITUS

By : Rifky Octavia Pradipta

Diabetes mellitus (DM) is a chronic non-communicable disease with a significant impact on health, economic, social and psychological status. Diabetes requires a long treatment, so it does not only involve nurses, but also requires the patient's active role in its implementation. The ability to manage (self-management) is an important thing that must be owned by type 2 DM patients. Good self-management is the basis for realizing self-empowerment in type 2 DM patients. The trend of the prevalence of DM which continues to increase, must be balanced with good self-management by the patient. Currently, various methods to establish self-management have been implemented, but inadequate self-management still occurs, including non-adherence to treatment, non-adherence to diet and lack of physical activity. It is estimated that only one-third of patients with DM are able to perform self-management effectively, while more than half of patients with DM report stress about the condition and complex treatments of the disease. This review aimed to analyse the effectiveness of self-management of diabetes on self-empowerment in patients with type 2 diabetes mellitus.

The study used a systematic review method that describes the results of evidence-based assessments of self-management with various methods of implementing education. This research was conducted by searching for articles in the Scopus, CINAHL, ProQuest, SAGE, Science direct and SpringerLink databases. Article searches are performed using keywords and Boolean operators (AND, OR NOT, or AND NOT) to specify searches, so that articles that match the research objectives are obtained. Keywords in this systematic review are adjusted to the Medical Subject Heading (MeSH), namely "Self-management", "Type 2 Diabetes", "HbA1c", "HRQOL". Searches are limited to English and data sources are limited to articles published from 2015-2020. The Centre for Review and Dissemination and the Joanna Briggs Institute Guideline as a guide in selecting and determining the quality of the studies summarized. Reporting systematic review is written using the checklist guide from PRISMA. The quality of the studies used in this study was obtained through a search strategy using the PICOS framework method.

The selection process for articles resulted in 197 articles from six databases. The same article was then excluded so that 153 articles were obtained. A total of 37 articles were excluded based on participant, intervention, outcomes and study type. Participant with DMT1 and focus on family do not include in the study. Irrelevant intervention and study outcomes which did not explain about HbA1c and quality of life are excluded. Observational and review study also do not include in the study. The first exclusion resulting 116 articles. Second exclusion remove 52 articles, resulting 64 articles with full text and fulfil the eligibility criteria. Study identified from searching in reference list, resulting 30 articles to review.

Self-management that conducted in every country have different method for patients as well as the outcome. In this systematic review, all the method were summarized to seek the most feasible method for diabetes type 2 patient in Indonesia. Several consideration for choosing the feasible method include availability of resources, patients background and demographic characteristics, and benefit aspect of the method. The Indonesian Society of Endocrinology (PERKENI) state that there are four pillars in treating diabetes. The four pillars of diabetes management are implementing a healthy lifestyle in the form of nutritional therapy (balanced diet), physical activity, taking medication as recommended, and education. Supporting this issue, adapting method should follow the recommendation and focus on patient needs and problem. Likewise, the ability of nurse must take into concern in handling DM cases, both in the preventive, promotive, curative, and rehabilitative aspects. Therefore, four intervention were chose including goal setting oriented, family-oriented self-management, self-management exercise program, and the acceptance and commitment therapy.

Each method of self-management is made to support diabetes treatment. Goal setting oriented is focus on diet management and physical activity in which patients must set up their target first to gradually change lifestyle. Family oriented self-management focusing on support from patients' family to help patient in early detection of foot ulcer and foot care. Family also helps patient to monitor the adherence of medication, preventing to skip taking medicine. Acceptance and commitment therapy as a method to relief and reduce stress. Guiding the patient to accept the condition, treatment and any other changes regarding diabetes in their life. Strength training exercise provide physical activity which patient can choose. There are wall push-ups, standing leg raises, standing leg curls, knee extensions, and toe stand. Physical exercise helps patient to control the blood pressure and level of blood sugar. Self-management are working as expected if the method are combined and adapting patient condition. Summary from systematic review shows that combination of self-management method will be able to control the level of HbA1c and gradually change the behaviour of patients to become more healthy and improve their quality of life.