

Response to "Rudat Sasambo (RUSA) Diabetes Mellitus Exercise According to FITT, Reduce Blood Glucose Levels in Patients with Type 2 Diabetes Mellitus"

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INTRODUCTION

We have carefully studied one of the articles published in this journal on August 31, 2022 with the title "Rudat Sasambo (RUSA) Diabetes Mellitus Exercise According to FITT, Reduce Blood Glucose Levels in Patients with Type 2 Diabetes Mellitus" (Figure 1). These results are beneficial for patients with type 2 diabetes mellitus, especially in controlling their blood sugar.⁽¹⁾

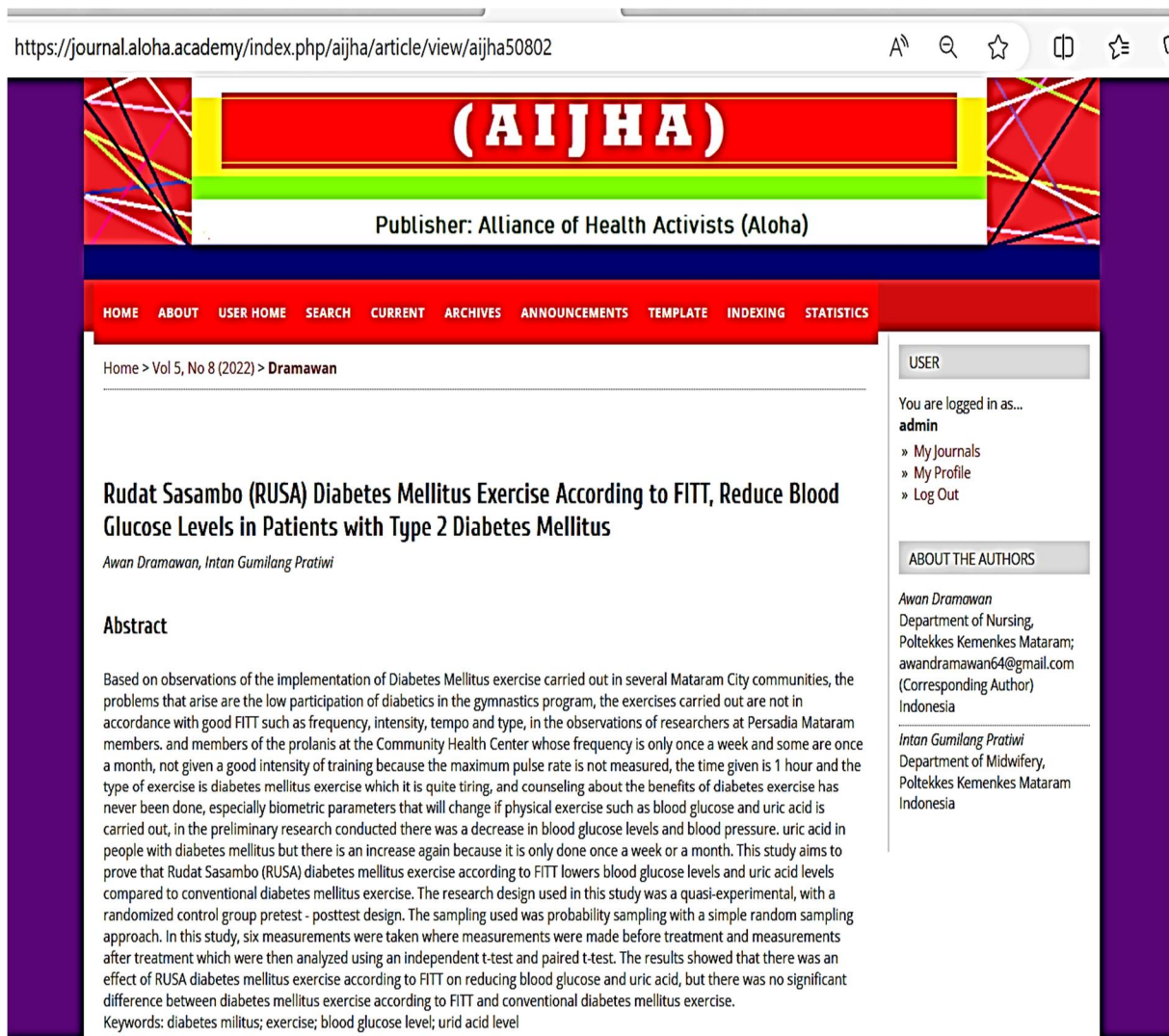


Figure 1. Articles selected to be responded to in the letter

This research has several advantages, namely: 1) providing scientific evidence about the effectiveness of Rudat Sasambo (RUSA) diabetes mellitus exercise according to FITT in reducing blood glucose and uric acid levels in type 2 diabetes patients, thus providing a strong basis for recommending this exercise as part of important in the management of type 2 diabetes mellitus; 2) using a quasi-experimental design with a randomized control group and pretest-posttest, allowing researchers to compare the effects of RUSA diabetes mellitus training according to FITT with conventional diabetes mellitus training; 3) using a representative sample of type 2 diabetes patients at the Mataram City Health Center, Indonesia so as to produce data that is representative of the type 2 diabetes patient population in the region; 4) provide a comprehensive statistical analysis to evaluate the differences in reduction in blood glucose and uric acid levels between the intervention group and the control group, which can show significant differences in reduction in blood glucose and uric acid levels between the two groups; 5) highlighting the importance of physical exercise in the management of diabetes mellitus, so that it can show that RUSA diabetes mellitus exercise according to FITT can help reduce blood glucose and uric acid levels in type 2 diabetes patients, so that it can provide further support for including physical exercise as an important part of the diabetes mellitus treatment plan.

RESPONSE

However, we also see that this study still contains several weaknesses, namely: 1) limited generalizability of the results of the study, because this study was conducted at the Mataram City Health Center, Indonesia, using a sample of type 2 diabetes patients in that area, so the results of this study may not be can be directly applied to populations of patients with type 2 diabetes in other regions or in other countries; 2) there is potential for bias in sampling, e.g. if only patients with lower diabetes severity participated in the study, the results may not reflect the effect of RUSA exercise in patients with higher severity; 3) the potential for bias in measurement, because there is the possibility of measurement errors or variations in measurement techniques between different observers, which can affect the validity and reliability of research results; 4) the duration of the study was relatively short, namely 6 weeks, with an exercise frequency of 3 times a week, so it may not be long enough to observe the long-term effects of RUSA exercise on reducing blood glucose and uric acid levels; 5) the presence of potential confounding factors, because even though this study used a control group, there is still the possibility that there were other factors that could affect the results of the study, such as changes in medication or the patient's diet during the study.

CONCLUSION

This study has advantages in terms of the specificity of the intervention and its usefulness for controlling blood sugar and uric acid levels for patients with type 2 diabetes mellitus, but it still has limitations in the methodology applied, so we make the following suggestions: 1) broaden the sample coverage not only in patients with type 2 diabetes mellitus and not only in the work area of the puskesmas, but it could be considered to take samples from various regions or even different countries to increase the generalization of research results;⁽²⁾ 2) to better control the confounding factors because there is still the possibility that there are other factors that can influence the results of the study, so that in further research one can consider using a more robust research design, such as a randomized controlled design or cohort study, to control factors -better confounding factors;⁽³⁾ 3) extend the duration of the study to observe the long-term effects of exercise;⁽⁴⁾ 4) using more accurate and consistent measurement methods; 5) expanding the observed variables, such as blood pressure, lipid profile, or other biometric parameters, in order to obtain a more comprehensive understanding of the effect of RUSA exercise on type 2 diabetes patients; 6) involve a more representative control group, taking into account factors such as diabetes severity, age, and other co-morbidities.

Taking these recommendations into account, further research may provide a deeper understanding of the effects of RUSA exercise in type 2 diabetes patients and make a greater contribution to the management of diabetes mellitus.

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