## Jurnal Sains dan Teknologi

Volume 12 Number 1, Tahun 2023, pp. 11-16 P-ISSN: 2303-3142 E-ISSN: 2548-8570

Open Access: https://doi.org/10.23887/jstundiksha.v12i1.59711



# Self-Spiritual Healing Therapy on Anxiety Conditions in Diabetes Type II in the Lovina Tourism Area

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## ARTICLE INFO

### Article history:

Received November 22, 2022 Revised November 29, 2022 Accepted January 14, 2023 Available online April 25, 2023

# Kata Kunci:

Diabetes, Yoga, Kecemasan, Spiritual

#### Keywords:

Diabetes, Yoga, Anxieties, Spiritual



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### ABSTRAK

Pasca pandemi, perawatan pasca akut menjadi penting untuk menjaga kesehatan pada pasien dengan penyakit kronis. Diabetes tipe II (diabetes melitus) merupakan penyakit kronis degeneratif yang jumlah kasusnya terus meningkat dari waktu ke waktu. Peningkatan ini juga sejalan dengan meningkatnya minat individu terhadap terapi spiritual dan metode terapi spiritual ini efisien karena dapat dilakukan secara mandiri dan dengan tutorial online. Penelitian ini bertujuan untuk membuktikan efektivitas spiritual healing dalam menurunkan tingkat kecemasan pada pasien diabetes tipe II. Penelitian ini merupakan penelitian eksperimen semu (quasi eksperimen). Eksperimen semu adalah eksperimen yang memerlukan perlakuan tetapi tidak menggunakan penetapan acak dalam membuat perbandingan untuk menyimpulkan adanya perubahan akibat perlakuan. Penelitian pada tahun pertama ini menggunakan teknik analisis kuantitatif dan deskriptif kualitatif sesuai dengan karakteristik data yang dibutuhkan untuk mendeskripsikan setiap permasalahan penelitian. Berdasarkan hasil analisis data dan pembahasan, disimpulkan bahwa kecemasan adalah suatu kondisi dimana tubuh kita mengalami perasaan cemas dan gelisah yang dapat timbul karena adanya pemicu (stressor). Peran yoga dalam mengurangi kecemasan di sebagian besar jurnal dikatakan berhubungan positif dan terbukti berpengaruh signifikan.

# ABSTRACT

After pandemic, post-acute care is being important to maintain wellness in patient with chronic disease. Diabetes type II (diabetes mellitus) is a degenerative chronic disease whose number of cases is increasing from time to time. This increase is also in line with the increasing interest of individuals in spiritual healing and this spiritual healing method is efficient because it can be done independently and with online tutorials. This study aims to prove the effectiveness of spiritual healing in reducing anxiety levels in diabetes type II patients. This research is Quasi-experimental research (quasi-experimental). A quasi-experiment is an experiment that requires treatment but does not use random assignment in creating comparisons to conclude that there is a change due to treatment. This research in the first year uses quantitative and descriptive qualitative analysis techniques according to the characteristics of the data needed to describe each research problem. Based on the results of data analysis and discussion, it was concluded that anxiety is a condition where our bodies experience feelings of anxiety and restlessness that can arise from the presence of a trigger (stressor). The role of yoga in reducing anxiety in most journals is said to be positively related and proven to have a significant effect.

# 1. INTRODUCTION

Diabetes Mellitus (DM) comes from 2 words, namely 'diabetes' which in Greek means derivative and 'melittus' which in Latin means sweet. Diabetes mellitus is defined as a disease 'metabolic syndrome' characterized by elevated levels of glucose in the blood (hyperglycemia) which was first confirmed in 1776 in the United Kingdom because glucose was found in the blood and urine of patients (Fareed et al., 2017; Galicia-Garcia et al., 2020; Xiao et al., 2014). Increased glucose levels in people with diabetes mellitus can be caused by a deficiency of insulin secretion or due to insulin action itself. Broadly, diabetes mellitus can be grouped into several types based on its etiology, including diabetes mellitus type 1, diabetes mellitus type 2 and several other cases that have a small prevalence making it difficult to classify (Aravinda, 2019; Bellou et al., 2018; Bhattacharya & Roy, 2017). Another type is gestational diabetes where this diabetes occurs due to glucose intolerance that began to appear in early pregnancy. Monogenic diabetes, which is rarely heard, is also a type of diabetes but is classified as rare caused by a genetic defect of pancreatic beta cell function where one of the concerns is neonatal diabetes that appears in infants aged 6 months and this type cannot be distinguished from diabetes mellitus Type 1 is clinically present but a

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sulfonylurea can be given instead of insulin (Care, D., & Suppl, 2018; Xin et al., 2019; Yaribeygi et al., 2019). The characteristic of this monogenic diabetes is that it usually occurs in younger age categories then this feature is used as a differentiator with other types of diabetes. Additional testing is also needed to identify other atypical forms for proper management as in all persons with diabetes mellitus type 1, it must be confirmed whether the diagnosis occurs before 6 months of age, and if it is right, the genetic testing should be performed (Chwalba & Dudek, 2019; Fareed et al., 2017; Punthakee et al., 2018).

Diabetes has caused many deaths and is a problem that until now has not been well resolved so that diabetes is categorized as an epidemic. Base on previous study the number of people with diabetes continues to increase as reported by the International Diabetes Federation (IDF) where in 2017 there were 425 million people suffering from diabetes and it is estimated that 629 million people by 2045 (Galicia-Garcia et al., 2020). Among the types of diabetes that have been described, diabetes mellitus type 2 has the highest prevalence which represents >90% of all diabetics (Guangcui Xu, 2015; Javeed & Matveyenko, 2018; Laakso, 2019). The increasing incidence of this disease is expected to continue and in the United States alone it is estimated that it will affect one in three people by 2050 (Khan et al., 2020; Ligita et al., 2019; Lu et al., 2019). Currently, the number of people with diabetes mellitus type 2 is equivalent to 6.28% of the total world population and in 2017 there were more than 1 million deaths from this disease and its comorbidities. This figure makes diabetes mellitus type 2 a disease that is ranked ninth as the main cause of death where this ranking is increasing rapidly compared to 1990 which was still ranked eighteen (Lundqvist et al., 2019; Mota et al., 2015).

Indonesia is a country with a fairly high number of people with diabetes and diabetes has been the focus of health problems since the 1980s with a total number of sufferers of around 10 million and a prevalence rate of 6.2%, of course, making diabetes one of the biggest causes of death in Indonesia (Arruum & Novieastari, 2020; Sami et al., 2015). Previous study in 2013, even globally, Indonesia was included in the top 10 countries with the highest diabetes rates and is predicted to continue to produce the same pattern in the future if management and interventions to prevent diabetes are not carried out properly (Ligita et al., 2019). The result of other study the concepts of spirituality and religiosity in the context of type two diabetes mellitus nursing explain that the role of the concept of God for diabetics greatly determines the psychological condition that provides peace for the patient (Ardian, 2016). Various studies have been conducted on prayer and relaxation therapies for diabetes mellitus patients. Therefore, through this literature review, the author wants to know spiritual therapy (meditation and relaxation) in Diabetes Mellitus type 2 patients (Mota et al., 2015; Pippitt et al., 2016).

An individual's efforts to get their diabetes under control are as powerful as a person's efforts to prevent diabetes. People in developed countries such as America and Europe make their old age qualified by managing their chronic diseases (Randeria et al., 2019; Sami et al., 2015; Schwartz et al., 2017). Many of these foreign nationals then choose Indonesia as a place to spend their old days. Their old age with or without chronic disease is enjoyed very well in Indonesia, especially in Bali, the medical records of foreign patients are often shown to doctors on duty in Indonesia and they always want to confirm the date of the return check and what the next treatment regimen will be (Jensen, 2018; Sears & Perry, 2015). In addition it is the desire of complementary treatment. The desired non-pharmacological therapy is in the form of spiritual healing therapy. They want therapy for their chronic disease conditions, one of which is dominated by diabetes mellitus, so they can get holistic treatment (Shahim et al., 2017; Silva et al., 2020). The intended holistic treatment is pharmacological and non-pharmacological therapy (spiritual, exercise and diet assistance). Like Bali, previous study state it has superior potential for spiritual healing coupled with modern medicine so that it can become a potential health tourism (Darmawijaya et al., 2019).

Through beginning of interviews with guest in the Lovina tourism area, several changes were felt by tourists after receiving spiritual treatment including: From the subject's point of view there were positive sensations in the body and changes in anxiety complaints. Based on a preliminary study through a study of the number of tourist visits and expatriates with diabetes type II, it was found data at several first-level health facilities in the Lovina area that patients experience anxiety about complications from their illness. From this anxiety problem, through a literacy study, researchers found evidence that spiritual healing can reduce anxiety in several chronic disease conditions. Therefore, researchers want to prove the effectiveness of spiritual healing in reducing anxiety levels in diabetes type II patients because diabetes Type II (diabetes mellitus) is a degenerative disease whose number of cases is increasing from time to time. This increase is also in line with the increasing interest of individuals in spiritual healing and this spiritual healing method itself is efficient because it can be done independently and with online tutorials.

## 2. METHOD

This type of research includes Quasi-experimental research (quasi-experimental) in 2020. A quasi-experiment is an experiment that requires treatment but does not use random assignment in creating comparisons to conclude that there is a change due to treatment. The research design uses a time series design using a series of observations so that the validity is higher. Before the treatment, the respondent's level of anxiety was observed based on 36 HARS scales. The treatment was carried out once a week for 3 consecutive weeks. Anxiety measurements were also carried out after each treatment every week. The location of this research is the Lovina Tourism area, Buleleng Regency. The selection of the Lovina Tourism area in Buleleng Regency was based on the consideration of the number of tourists who were netted by conditions of migration restrictions. Returning to their country in Covid 19 and expatriates with the highest diabetes cases compared to other tourist areas in Buleleng Regency. in this study were selected as research subjects using inclusion and exclusion criteria.

The subjects of this study include Relevant informants, partner 1: diabetes type II patients, Partner II: Families of Diabetes Type II Patients, and Partner III: Health Workers in Health Facilities. The model is spiritual healing treatment with self-therapy assistance in the form of meditation/relaxation and appropriate intake. The objects in this study were anxiety scores and random blood sugar scores of foreign nationals (tourists and expatriates) in the Iovina area and complaints that were suspected to still require a touch of management that not only treats physical but also psychological conditions. Due to the COVID-19 pandemic, some expatriates returned to their home countries, therefore we used diabetes type 2 patients in the Lovina area who were randomly selected from the patient list of doctors/health centers in the region.

The data collection method used is using primary data sources, namely, data obtained directly from respondents, primary data in this study is the level of anxiety in patients with diabetes mellitus and secondary data, data on complaints related to anxiety and random blood sugar participants of tourist and expatriate patients at health facilities. First Level in Lovina area. The research phase was carried out by collecting data from various sources including: literature sources and measurements in the field with anxiety questionnaires, medical record data, and random blood sugar level data. For some aspects, an indepth study in the field of medicine is needed by reviewing it through interviews. The phenomenon that wants to be revealed is based on knowledge, physical needs, psychological needs, health service procedures (the process of obtaining and monitoring treatment), family support, and possibly other phenomena obtained through observation, and in-depth interviews in the field. This study uses a pre-experimental approach with the form of research in the form of pre-post group design. Samples were taken by purposive sampling. The measurement instrument of this study used the Hamilton Rating Scale for Anxiety (HRS-A). This research was carried out in a virtual meeting room media and at the residence of respondent, yoga practice was carried out routinely 2 times a week for 3 weeks with duration of 45 minutes per session led by an instructor and with video and module guidance.

# 3. RESULT AND DISCUSSION

# Result

The risk factors that underlie the emergence of diabetes mellitus type 2 are classified into 2, namely modifiable factors and non-modifiable factors. Modifiable factors are factors that can be changed and prevented such as frequent consumption of foods high in fat and simple carbohydrates, impaired glucose tolerance, metabolic syndrome, high blood pressure (≥140/90 mmHg), increased blood cholesterol levels (≥250 mg/dl). ) and rarely do physical activity (<3 times a week). Then the non-modifiable factor is the opposite where this factor cannot be changed at all and is usually related to genetics, namely family history, and is in line with increasing age. The pathophysiology of diabetes mellitus type 2 is based on several conditions. The most basic is the failure of beta cell function in the pancreas causing the work and secretion of insulin to be abnormal so that blood sugar levels become high. Reduced insulin secretion makes it difficult for the body to maintain normal glucose levels and insulin secretion also plays a role in increasing glucose production in the liver and can reduce glucose use in muscles, liver, and adipose tissue. Diabetes mellitus type 2 is classified into 5 clinical stages including stage 1: prediabetes, stage 2: Diabetes without complications, stage 3: Diabetes with mild complications, stage 4: Diabetes with absolute insulin deficiency, and stage 5; Diabetes with serious complications

In diagnosing diabetes mellitus type 2, the first thing to pay attention to is the classic signs of hyperglycemia, namely polyuria, polydipsia, polyphagia, and weight loss in the patient, plus one measurement of blood sugar levels at 200 mg/dL (11.1). mmol/L) or fasting plasma glucose level 126 mg/dL (7.0 mmol/L) or plasma glucose level after 2 hours 200 mg/dL during an oral glucose tolerance test (OGTT) with a glucose load of 75 g which should still be tested repeated for a definite diagnosis. If

after repeated checks the results are not under the diagnostic criteria, then it should be tried with other modalities that can help.

## Discussion

Diabetes mellitus type 2 is a metabolic disease characterized by an excess caloric intake compared to energy expenditure. The emergence of this disease is characterized by a progressive defect in insulin secretion due to insulin resistance which also causes an increase in the body's need for insulin to compensate for glucose homeostasis (Obradović et al., 2019; Silva et al., 2020; Skyler et al., 2017). If the pancreatic beta cells fail to produce insulin during the compensation process, there will be an increase in blood glucose hyperglycemia gradually. This chronic hyperglycemia is dangerous and can cause increased morbidity and mortality due to dysfunction and organ failure (Sobczak et al., 2019; Sohail et al., 2017; Wu, 2015). These three basic practices have the main goal of exercising physical and mental health so that in the current era, many people use yoga as adjuvant therapy for psychological complaints, one of which is anxiety. The role of yoga in reducing anxiety in most journals is said to be positively related and proven to have a significant effect (Obradović et al., 2019; Sutarya, I. G., & Sirtha, 2017; Valaiyapathi et al., 2020). This is thought to be due to a positive influence when doing yoga, resulting in a down regulation mechanism of the hypothalamic-pituitary adrenal axis and the sympathetic nervous system. The opinions of experts regarding the mechanism of reducing anxiety, due to yoga therapy are very diverse, but currently, yoga is still an additional therapy besides medicine (Jensen, 2018; Sears & Perry, 2015; Shahim et al., 2017).

Previous study examine the concepts of spirituality and religiosity in the context of type two diabetes mellitus nursing explain that the role of the concept of God for diabetics greatly determines the psychological condition that provides peace for the patient (Ardian, 2016). Other study state that Indonesia was included in the top 10 countries with the highest diabetes rates and is predicted to continue to produce the same pattern in the future if management and interventions to prevent diabetes are not carried out properly (Ligita et al., 2019). Various studies have been conducted on prayer and relaxation therapies for diabetes mellitus patients. Therefore, through this literature review, the author wants to know spiritual therapy (meditation and relaxation) in Diabetes Mellitus type 2 patients (Mota et al., 2015; Pippitt et al., 2016).

The implication of this study provide overview related to several conditions can also be associated with the occurrence of diabetes mellitus type 2 where there will be a higher risk in patients with metabolic syndrome and gestational diabetes which in someone with gestational diabetes the risk is seven times higher and both risks are also associated with other factors, namely genetic and environmental. This study also has limitations, the limitations of this study lie in the relatively short research time. So that the research results are not in-depth enough, therefore future research is expected to further deepen and expand research related to self-spiritual healing therapy.

# 4. CONCLUSION

Anxiety is a condition in which our bodies experience feelings of anxiety and restlessness that can arise from the presence of a trigger (stressor). Yoga is adjuvant therapy practices from India that can help reduce stress and negative feelings, as well as improve mental and physical symptoms. Yoga practice is designed to facilitate the development and integration of the human body, mind, and breath to produce structural, physiological, and psychological effects. Yoga practice is the union of the eight limbs of yoga, described by a Patanjali, namely pranayama (breathing), asana (movement), and dhyana (meditation).

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