



การใช้ปรัชญาศาสนาพุทธจัดการโรคเบาหวานชนิด 2 ในผู้ป่วยเบาหวาน ประเทศไทย

Buddhist Philosophy as an Approach to Managing Type 2 Diabetes Mellitus among Diabetic Patient, Thailand

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บทคัดย่อ

ประเทศไทย มีจำนวนประชากรที่เป็นโรคเบาหวานชนิด 2 เพิ่มขึ้นอย่างมาก โดยมีจำนวนผู้ป่วยที่เป็นโรคเบาหวานทั้งหมดมากกว่า 6 ล้านคน หรือประมาณ 11.6% ของประชากรทั้งหมดที่ได้รับผลกระทบจากการป่วยด้วยโรคเรื้อรังนี้ 95% ของประชากรไทยนับถือศาสนาพุทธ นิกายเถรวาท (Theravada Buddhism) พุทธศาสนามีความสำคัญต่อการดำรงชีวิต เป็นส่วนหนึ่งของสังคม และวัฒนธรรม จอน โคเบท ชินน์ จิตแพทย์ชาวอเมริกา ได้พัฒนาวิธีการทำสมาธิเพื่อการรับรู้ในปัจจุบัน โดยมีรากฐานมาจากหลักพุทธศาสนา (Mindfulness-Based Stress Reduction: MBSR) มาใช้เพื่อลดความเครียด ความวิตกกังวล รวมทั้งความเครียดที่เกิดจากโรคเบาหวาน นอกจากนี้การนำวิธีการทำสมาธิเพื่อการรับรู้ในปัจจุบัน ยังส่งผลดีต่อพฤติกรรมการดูแลตนเอง และการจัดการอาการ ซึ่งช่วยป้องกัน หรือ ชะลอการเกิดภาวะแทรกซ้อนต่าง ๆ จากโรคเบาหวาน นอกจากนี้วิธีการทำสมาธิเพื่อการรับรู้ในปัจจุบันแล้ว ศาสนาพุทธยังมีหลักคำสอนที่สำคัญ เป็นเหตุเป็นผล ได้แก่ อริยสัจสี่ อริยมรรคแปด และเชื่อในกรรม หรือกฎแห่งกรรม คำสอนตามแนวทางของพุทธศาสนาดังกล่าว อาจเป็นประโยชน์ต่อผู้ป่วยเบาหวานชนิด 2 ในการจัดการอาการเบาหวาน บทความนี้มีจุดประสงค์เพื่อศึกษาหลักฐานเชิงประจักษ์เกี่ยวกับการนำหลักคำสอนของพุทธศาสนาใช้ในการจัดการโรคเบาหวาน เพื่อให้เกิดประโยชน์แก่ตัวผู้ป่วยเอง และ/หรือใช้ร่วมกับการรักษาของแพทย์แผนปัจจุบัน

คำสำคัญ: ศาสนาพุทธ การจัดการ โรคเบาหวาน เบาหวานชนิด 2

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Abstract

Type 2 Diabetes Mellitus (T2DM) continues to have a substantial and growing impact upon the population of Thailand with over 6 million people, or approximately 11.6% of the population suffering from this chronic disease. Theravada Buddhism is practiced by almost 95% of the Thai population and is an intricately woven part of the social and cultural fabric of the country. Mindfulness Based Stress Reduction (MBSR), derived from Buddhist techniques, has been successfully used to reduce stress, anxiety, depression, and diabetes distress among adults with diabetes. Additionally, mindfulness-based interventions (MBIs) can contribute to better self-care and self-management behaviors which help prevent or delay physiological complications. In addition to being the progenitor to MBSR, Buddhism contains a rational structure embodied within The Four Noble Truths, The Eightfold Path, and belief in Karma or Law of Karma that may be successfully used by Thai persons with T2DM to help manage their disease. This article explores the existing evidences on how core Buddhist principles may be successfully extracted and/or incorporated into strategies augmenting conventional treatments for Thais with T2DM.

Keywords: Buddhism, Diabetic management, Type 2 diabetes

Introduction

Today, in Thailand, T2DM has become increasingly prevalent without regard to socioeconomic considerations. In the latest report from the International Diabetes Foundation's Diabetes Atlas, 10th edition, (2021) it is estimated that over 6 million Thais, or approximately 11.6% of the population suffer from this chronic disease. T2DM, while certainly life changing, need not be life threatening. Lifestyle modifications, including diet, exercise, adherence to medication, mental outlook and changes in other aspects of daily living can provide those suffering from this chronic disease with a path to a near normal life. However, incorporating such lifestyle modifications, and maintaining them over the long-term can be quite challenging and stressful for the diabetic patient. Diabetes-related distress (DRD) is commonly suffered by Thai diabetics within Thailand. A study conducted in Chiang Mai Province of 370 diabetic patients with T2DM found that HbA1c and co-morbidity were significantly associated with total DRD (Tunsuchart, Lerttrakarnon, Srithanaviboonchai, Likhitsathian, & Skulphan, 2020). Similarly, a study conducted of diabetic



patients in Nampong Hospital in Khon Kaen Province showed an association of depression and stress to HbA1c levels (Sulukananuruk, Jaisanook, & Muktabhant, 2016) Components of DRD include concern, struggle, exasperation, and despair, and deals primarily with the following four main areas: 1) frustration with the demands of self-care, 2) apprehension about the future and the possibility of developing serious complications, 3) concern about both the quality and the cost of required medical care, and 4) perceived lack of support from family and/or friends (Beverly, Ivanov, Court, & Fredericks, 2017). Long-term suffering from emotional stress related to diabetes can be directly attributable to DRD. (Tunsuchart et al, 2020). In direct contrast, in the experimental phase of Worowi, Varabho, & Inmoung, (2019) they found the diabetes patients in the experimental group who were practicing Medicinal Dharma Principles (listening to dharma, pray, and meditation) had increased score of holistic healthcare behaviors as well as they had a better control of fasting blood sugar (FBS) and HbA1c than those who were in the control group.

Buddhism, as the name implies is based upon the teachings of the Buddha, or as he is also known, ‘The Enlightened One’. The Buddha became enlightened when he realized the cause of human suffering and the requisite path to alleviate such suffering. Buddhism, therefore, is best described as “a personal and social therapy that can serve as the physician of any human culture” (Jacobson, 1986). Mindfulness Based Stress Reduction (MBSR) methodology is derived from Buddhism, but it is not the only aspect of Buddhism that can be employed to help in the management of T2DM (Kalra et al, 2018). Indeed, the teachings of the Buddha are aimed solely at liberating sentient beings from suffering, not dissimilar to the medical profession attempting to relieve pain and suffering in their patients. Developing an understanding of the core of Buddhism and its approach to relieving suffering may help the diabetic patient liberate themselves from suffering from the consequences of T2DM and achieve long-term engagement of healthful modalities. This article both explores the fundamental structure of Buddhism as well as how this structure may be extrapolated to create practices supporting Thais living with T2DM.



Buddhist Doctrine

In Buddhism, all suffering emanates from the mind. Suffering is personal in both how it is created and how one feels. The Four Noble Truths delineated below rest upon this foundational concept.

1. Suffering is experienced in all existence (Sanskrit/English –Duhkha, Pain)
2. The origin of such suffering is craving that which one cannot have in conjunction with ignorance (Sanskrit/English – Samudaya, Arising)
3. Removal of this craving and ignorance removes the suffering (Sanskrit/English – Nirodha, Ending)
4. Demolishing craving and alleviating ignorance are accomplished by following the Noble Eightfold Path which includes right view, right intention, right speech, right action, right livelihood, right effort, right mindfulness, and right concentration. (Sanskrit, English – Magga, Path)

The superstructure of Buddhism consists of the Buddha, his teachings, otherwise known as the Dharma, and the Sangha, the community of monks, nuns and other members providing support and helping to guide the lay person in their journey to Enlightenment.

Other key components of Buddhism that are important from the perspective of accepting and managing diabetes include karma and meditation or mindfulness.

Using the Four Noble Truths in a Diabetes Context

Ultimately the administration and adherence of therapies to mitigate the effects of diabetes are the responsibility of the patient. Diabetes self-care is personal, and is a lifetime endeavor, a continual journey, with moments of doubt and times when all may seem overwhelming. It shares many similarities to the personal journey a Buddhist may experience as they move towards Enlightenment. Buddhism is less religion in the classical sense, as it does not contain any element of supernatural or deity worship and is more akin to a philosophy of how to live life. It defines a path and a methodology that one can use to become enlightened and cease their personal suffering. The Four Noble Truths in a Buddhist context and each of its related diabetic truth follow below.

The First Noble Truth concerning the universality of suffering is an absolute and requires acceptance of such by a Buddhist. Without this acceptance there can be no improvement in the current



condition. Similarly, a diabetic must accept the chronicity of their disease. They must also accept their limited control over its progression and that the likelihood is that it will not end in this lifetime,

The Second Noble Truth where suffering is continual and unending when one continues to crave or cling to attachments and chooses to remain ignorant can be likened to a diabetic who continues to follow unhealthful practices and remains ignorant to solutions allowing for a less traumatized existence.

The Third Noble Truth that suffering can be eliminated can be extrapolated within the diabetic context as one of living a full and satisfying life even while being a diabetic.

The Fourth Noble Truth requires the following of the Noble Eightfold Path, or as the Buddha stated the Middle Way of moderation, to alleviate suffering. In a diabetic patient context this would be analogous to implementing strategies to achieve the highest quality of life while living with diabetes.

The strategy espoused by the Buddha in the Four Noble Truths mirrors a “problem-solving” strategy. Namely, 1) identify the problem, 2) identify the root cause(s) of the problem. Do not confuse symptoms and problems, 3) develop a plan to remove the cause of the problem and, and 4) implement the plan. An example of how the four Noble Truths might be used as shown in the table (Table 1).

Using this Buddhist problem-solving approach can be easily emulated to develop a problem-solving methodology that is easily recognizable by a practicing Thai Buddhist. It provides a personally relatable structure that can help Thai persons with T2DM to effectively cope with their diabetes and experience a good quality of life.

One may take this structure and methodology and apply it to develop a long-term care model that allows the patient to accept the reality of their condition but not be held prisoner to it. Diabetes is real, but the choice of “living with” vs. “suffering from” is the difference between successful and unsuccessful coping.

**Table 1** An example of the four Noble Truths might be used by Thai with T2DM

Step	Outcome
Identify the problem	Through examination and testing a diagnosis of T2DM is determined
Identify the root causes of the problem	Possible causes include any or all, but may not be limited to: <ol style="list-style-type: none"> 1. Poor Dietary Habits 2. Genetic predisposition 3. Excessive smoking, drinking or other unhealthful habits 4. Lack of exercise 5. Excessive body weight 6. Environmental stressors 7. Mental turmoil and stress
Develop a plan to alleviate or minimize the problem	Possible paths may include, but may not be limited to: <ol style="list-style-type: none"> 1. Use of medication for glycemic control 2. Eating in a healthy manner 3. Ceasing unhealthful habits 4. Increasing knowledge about T2DM and its care 5. Instituting regular exercise programs 6. Practicing Mindfulness based meditation <p>These are analogous to the steps described in the Noble Eightfold Path</p>
Implement the plan	Each day follow the plan developed in the prior step

The Noble Eightfold Paths

The Noble Eightfold path provides a clear map for the practicing Buddhist to achieve a reduction in their suffering. Typically, the eight components of the Noble Eightfold Path are considered to fall into three different categories: Insight and Wisdom; Morality and Meditation. The following analysis of the Noble Eightfold Path includes the Buddhist perspective as well as how it might be translated with a view to crafting a program/lifestyle approach for a Thai person with T2DM in managing their diabetes.



Insight and Wisdom involves “right view” and “right intention”. Right View is an expression of the positivity associated with attaining accurate knowledge of diabetes and what is required to successfully manage it. Right Intention requires the patient to be aware of their health and to continually explore new knowledge and advancements while also practicing strategies and techniques developed from such knowledge to gain confidence in their self-care capabilities.

Morality involves “right speech”, “right action” and “right livelihood”. Right Speech requires the diabetic to refrain from talking from a point of ignorance, or in fact, expressing falsehoods concerning their disease. Instead, it requires them to find certainty through factual knowledge. Right Action requires the patient to minister to their needs through appropriate lifestyle habits, adhering to clinic and/or doctor visits, taking medication and/or insulin as prescribed. Right Livelihood requires one to avoid partaking in activities that are not helpful in living a healthy life, such as excess alcohol consumption, smoking, overeating, etc. It also promotes exercise and a non-sedentary lifestyle in general.

Meditation involves “right effort”, “right mindfulness” and “right concentration”. Right Effort involves a commitment on the diabetic patient’s part to be actively engaged in the management of their disease. It requires one to use their minds to develop positive outlooks while minimizing any negativity. Additionally, the focus should be on reinforcing good practices and habits while concurrently recognizing and letting go of any bad ones. “Right Mindfulness”, or cognitive awareness of what is happening, when it is happening, provides a reinforcing feedback loop to understand when a reassessment may be necessary. “Right Concentration” is squarely based in meditation and is perhaps the keystone upon which all the others build upon. Studies over the past twenty years have confirmed the benefit of meditation to reduce stress and help people to achieve a sense of clarity. In fact, this one component may be the most helpful of all the Eightfold Paths.

To the Buddha, the mind was the origin of both personal suffering and personal non-suffering or enlightenment. The result being totally dependent upon the focus of the individual’s thoughts. Its importance so primary that the first two verses of the Dhammapada focus entirely on it:

Mind precedes all mental states. Mind is their chief; they are all mind-wrought. If with an impure mind a person speaks or acts, then suffering follows him like the wheel that follows the foot of the ox.



Mind precedes all mental states. Mind is their chief; they are all mind-wrought. If with a pure mind a person speaks or acts, then happiness follows him like his never-departing shadow (Buddharakkhita, 1985)

Mindfulness of breathing is perhaps the most prevalent form of meditation practice throughout both the Buddhist and non-Buddhist world. It consists of employing the technique of engaging the mind in focusing on the breath while the practitioner observes how their mind's wandering attention is drawn to intruding thoughts, sounds, bodily feelings, etc. The goal is to observe that there is a distraction, to not judge the nature of the distraction and then to refocus attention back to the inhalation and exhalation of breath (Winston, 2016).

Over the past twenty years there have been studies where meditation using the mindfulness of breathing have been used to successfully treat a variety of health disorders, including diabetes (Guo et al, 2019). Much of this research is based upon the pioneering work of Dr. Jon Kabat-Zinn who developed the Mindfulness Based Stress Reduction (MBSR) program (Kabat-Zinn, 2003). Diabetes and its complications, both physical and psychological are major stressors in the daily life of patients with diabetes. The tremendous lifestyle changes required to successfully manage diabetes can cause high levels of anxiety, depression, feelings of societal ostracism and problems with maintaining proper eating habits. Depression manifests in diabetic patients at a rate twice the frequency as would be expected by chance alone (Anderson, Freedland, Clouse, & Lustman, 2001) and the rate of depression relapse over a five-year period has been demonstrated to occur within up to 80% of diabetic patients with both conditions (Katon, 2008). MBSR is a useful method to help patients with type 2 diabetes to diminish their emotional distress and to improve glycemic control (Armani et al 2018). In a randomized control trial, Buddhist walking meditation exercise produced a multitude of favorable effects, often superior to a traditional walking program, in patients with T2DM. These favorable effects included significant decreases in HbA1c, both systolic and diastolic blood pressure and reduction in blood cortisol level (Gainey, Himathongkam, Tanaka, & Suksom, 2016)

Karma in Diabetes

Karma in Buddhism can best be thought of as a dependent state of existence where one's current state of existence is dependent upon the lived experiences of both past lives and the current



one. It is never static, but rather is dynamically changing based upon the actions and choices taken by the individual. Indeed, there is great focus in Theravada Buddhism, the dominant form of Buddhism practiced in Thailand, on the “making of merit”. Good intention creates good outcomes. “Metabolic memory” or the ‘legacy effect’ is a recognized phenomenon in current day medicine where early intensive control of hyperglycemia is able to decrease the risk of diabetic micro- and macro-vascular complications (Testa et al., 2017). Essentially, an individual’s intent and their actions influence their future health. Healthful intentions and actions can be considered as “medical karma”. (Thomas, 2014). Implementing medical karma such as tight glycemic control and vigorously maintaining blood pressure under threshold values has shown to have long-term positive effects in managing diabetes (King, Peacock, & Donnelly, 1999).

Conclusion

Unfortunately, T2DM shows no signs of disappearing and in fact continues to expand at alarming rates. There is a continuing need to create, develop and refine care models that will fully empower the patient in their self-care regimens, and to provide them with an ancillary system that contemporarily supports traditional diabetic patient healthcare. The Theravada Buddhist traditions and philosophy provide a means to do so, and in so doing the patient with T2DM can move closer to the goal of the Dhammapada V160 (Buddharakkhita, 1985)

One truly is the protector of oneself; who else could the protector be? With oneself fully controlled, one gains a mastery that is hard to gain.

Suggestions

The Buddhist concept of Right Meditation through the development of MBSR has been beneficial in treating patients with T2DM. Other aspects of Buddhist doctrine and philosophy such as pray, listening Dharma, should be explored as possible additional components to be used by patients with T2DM.



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