

## ISLAMIC HIJAMA FOR HEALTHY BLOOD SUGAR LEVEL ON ELDERLY WITH DIABETES MELLITUS IN SURABAYA-INDONESIA

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### ABSTRACT

#### Introduction

Islam is the perfect religion that is carried by Muhammad PBUH not only for healthy people but also for sick people as said in the Qur'an surah al-Fatihah verse 5: "iyyāka na'budu wa iyyāka nasta'in" which means "It is You we worship and You we ask for help." (Qs. Al-Fatihah [1]: 5) and surah al Isra' verse 82 "And we send down from the Al-Qur'an a bidder and mercy for those who believe and the Qur'an does not add to the wrongdoers other than losses" (Qs. Al-Isra' [17]: 82). A sahih hadith it is said that the Prophet Muhammad PBUH "...who had been cupped and had cupped him. He ordered Abd Taiba to give two cuppings (wet and dry), then he said, 'The best medicine that you can use for treatment is cupping

#### Method

The number of patients with Diabetes Mellitus increases every year, and Indonesia is a contributor to the top 10 diseases. In every 6 minutes, 1 patient with Diabetes Mellitus dies. In Surabaya alone, there are 35,092 cases of Diabetes Mellitus. Populations: All elderly with Diabetes Mellitus in Surabaya, a simple random sampling technique with a large sample of 107 elderly people. By experiment-observation pre post-test group control design

#### Result

After analysis, the Wilcoxon sign rank test was used in the intervention group 0.000 ( $p < 0.5$ ) and the control group 2.110 ( $p < 0.5$ ) and Mann Witney 0.000 analysis ( $0 < 0.5$ ). Discussion: Islamic Hijama shows significant good impacts on blood sugar levels. The hypothalamus secretes the corticotrophin factor, which makes the pituitary gland secrete balanced ACTH and makes a neuro-hormonal balance in the blood. Different from other inflammations which reduce blood sugar levels in patients with Diabetes Mellitus, puncture wounds and suctioning (cupping) on the body's back surface produce Prostaglandin E2

#### Conclusion

*Islamic Hijama is appropriate to be used to reduce blood sugar levels in the elderly who have Diabetes Mellitus.*

## INTRODUCTION

Hijama is a spiritual cupping care (SCC) used in Islamic and nursing practices to elderly with diabetes mellitus in Surabaya-Indonesia. Al-hijama was reported to be an excellent treatment for diabetes mellitus that improves blood chemistry in elderly and induced significant clinical improvement. It also improves the natural immunity and suppresses the pathological immunity through decreasing the serum level of autoantibodies, inflammatory mediators, and serum ferritin (a key player in autoimmunity). Furthermore, it can significantly reduce glucose severity, swollen joints, and disease activity with no significant side effects. Main steps of Al-hijama are skin puncture (cupping), scarification, and second puncture, and this is better treatment than the complementary alternative nursing (CAN) (Baghdadi, 2015; Zaidi, 2016; Haryanto, 2017).

The present article aims to examine some of the developments regarding the practice of Complementary Alternative Nursing (CAN) that has contributed towards this shift. It attends to the revival of *'Al-Tibb al-nabawī* (Prophetic medicine) in the context of CAN through an examination of how Islamic hijama (Spiritual Cupping Care) is promoted and practiced by hakims in contemporary Indonesia. The article is based on participant observation conducted in homes in Surabaya-Indonesia in 2014. The primary source of this study is the analysis of thesis and advertisements, whilst the secondary sources were taken from the history of Spiritual Cupping Care. Taking an approach that focuses on dynamic nominalism in Ian Hacking's sense, the process strongly connects what

comes to existence with the historical dynamics of naming and the subsequent use of a name. I propose that, after the complementary alternative was consciously de-Islamised by state authorities, promoting it instead as an indigenous system of nursing, Complementary practitioners working in the private sector are now contributing to a re-Islamisation of Complementary, a process that, for now, culminates in the official enactment of Complementary as Islamic nursing (Schmidt, 2018; Haryanto, 2017).

The prevalence of diabetes mellitus (DM) increases with age, and type 2 DM or known as non-insulin dependent diabetes mellitus (NIDDM) often occurs in old age, starting from the age of 45 years. As human spiritual power is able to improve the body system, cupping is an action that is recommended by The Prophet PBUH. With care which is the basis of nursing actions, spiritual cupping care for type 2 DM patients in order to reduce blood sugar levels still needs more proofs. Indonesia itself is in the top 10 countries with the largest number of DM sufferers with 8.5 million people. Usually, type 2 DM makes up to 95% of all types of DM. Of all the regions in Indonesia, Surabaya in East Java shows the highest number of DM cases. According to the Surabaya Health Service report of 2011, the number of DM sufferers who were registered to *Jamkesmas* (Public Health Insurance) in Surabaya alone reached 35,092 cases, and most of them were at the age of 45-54 years (pre elderly), with 12,169 cases. Meanwhile, the lowest level of service to the elderly and pre-elderly in Surabaya was at 2.07% of the 28,328 number of elderly and pre-elderly.

Moreover, there were 34 DM patients who belonged to elderly and pre elderly categories who sought treatment at the Mulyorejo Health Center in March 2014 (Dinkes Surabaya, 2011; Depkes R1, 2015).

## LITERATURE REVIEW

Muslims must believe the Qur'an of surah al-Fatihah Verse 5 "iyyāka na'budu wa iyyāka nasta'in" which means "It is You we worship and You we ask for help." (Qs. Al-Fatihah [1]: 5) and surah al-Isra' verse 82 "And we send down from the Al-Qur'an a bidder and mercy for those who believe and the Qur'an does not add to the wrongdoers other than losses" (Qs. Al-Isra' [17]: 82). A sahih hadith says that the Prophet Muhammad PBUH "...who had been cupped and had cupped him. He ordered that Abd Taiba to give two cuppings (wet and dry). Hijama is the Arabic version of wet cupping care that is a main pillar in prophetic care and health recommendations confirmed by the Prophet Muhammad PBUH. Then he said, 'The best medicine that you can use for treatment is cupping.'" (HR. Muslim) (Haryanto, 2017; Al Eidi, 2019; Aboong, 2019).

While the link to prophetic medicine has played a crucial role in the popularisation of Islamic hijama among the private sectors, it does not fully explain the revival of this forgotten Sunna. In turn, the Muslim patients' increased interest in '*Al-Tibb al-nabawī* (Prophetic medicine) in general and hijama in particular has also produced a growing demand for complementary alternative nursing in Indonesia as Islamic care (Haryanto, 2017; Schmidt, S.K., 2018).

Diabetes Mellitus cases in the world in 2011 reached 366 million people, and in 2013 it increased to 382 million with 5.1 deaths. Every 6 seconds someone dies of DM. Most of the type 2 diabetes patients in Surabaya were elderly with 12,169 patients (Risksedas, 2013; Dinkes Surabaya, 2014).

It has been shown that oxidative balance is altered and oxidative stress is increased just before and after hyperglycemia. In a study, oxidative stress markers were found to be higher in blood that was withdrawn by wet cupping compared with that in venous blood. However, the suggested complementary alternative nursing (Islamic hijama or Spiritual Cupping Care = SCC) could reduce oxidative stress. In the same study, nitric oxide, which is known to be a key molecule in insulin activity and is purportedly linked to acute attacks, was also determined to be higher in the cupping blood compared with the amount in venous blood, suggesting that its levels could be reduced using Islamic hijama (Spiritual Cupping Care) (Ersosy, 2019).

The aging of the population poses new challenges, among others, a greater concern with the intervention of hijama on elderly, especially to future health professionals. The spiritual cupping care was used to evaluate the impact of the aging process on type 2 DM patients. This study developed an end-of-life care nursing knowledge scale for gerontology nurses to measure nurse knowledge of elderly care. Theoretically, it was also to substantiate the necessity and possibility of rehabilitation work with the elderly in the conditions of their stay in the nursing home (Fernandes, 2019; Srikan, 2019; Okumura, 2019).

Diabetes mellitus (DM) is a chronic metabolic disorder characterised by elevated levels of blood sugar in elderly. Metformin is the initial drug option for most patients with type 2 DM if there are no contraindications, such as renal

impairment. In addition to having a hypoglycemic effect, metformin has been reported to exert a renal protective effect by activating adenosine monophosphate (AMP)-activated protein kinase signaling (Simin Luo, 2017; Ming-Chia Lee, 2019).

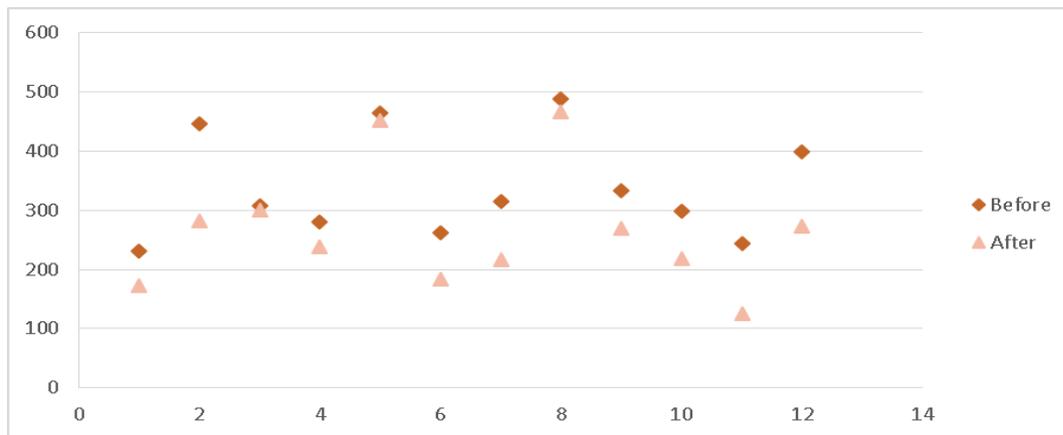
**Tables and Figures**

**Table 1:**

**Distribution of respondents based on demographic data of type 2 DM patients in Surabaya**

No	Demographic Data	n	Percentile (%)
<b>1</b>	Age		
	a. 41-45 years old	20	17
	b. 46-50 years old	10	8
	c. 51-55 years old	40	33
	d. 56-59 years old	50	42
<b>2</b>	Sex		
	a. Male	40	33
	b. Female	80	67
<b>3</b>	Occupation		
	a. Private employees	20	17
	b. Entrepreneurs	30	25
	c. Unemployed	70	58
<b>4</b>	Educational level		
	a. Primary school	80	66
	b. Secondary school	20	17
	c. High school	20	17
	<b>Total</b>	<b>120</b>	<b>100</b>

Distribution of respondents based on blood sugar levels



**Figure 1: Diagram X-Y (Scatter) Distribution of Blood Sugar Level Data on Patients Type 2 DM in the Pre-Test and Post-Test of Hijama Intervention (SCC) in Surabaya 2014**

**Table 2: Distribution of effects by respondents after Hijama (Spiritual Cupping Care=SCC) in Surabaya 2014**

No	Perceived effect	n	Percentile (%)
1	Positive effect	100	83
2	Negative effect	0	0
3	No effect	20	17
	<b>Total</b>	<b>120</b>	<b>100</b>

**Table 3: Distribution of respondents based on regular blood sugar check in Surabaya 2014**

No	Routine blood sugar checks	N	Percentile (%)
1	1-2 weeks	30	25
2	3-4 weeks	50	42
3	5-8 weeks	10	8
4	> 8 weeks	30	25
	<b>Total</b>	<b>120</b>	<b>100</b>

**Table 3: Distribution of blood sugar levels of Type 2 DM patients before and after Hijama (SCC) in Surabaya 2014**

Respondent	Treatment		Delta
	Pre	Post	
Mean	339,5	266,833	-72,66667
SD	88,411	103,151	
<i>Paired T-test</i>	p = 0,000		

## DISCUSSION

Islamic Hijama is an intervention in the form of Spiritual Cupping Care based on Islamic medical science in nursing services. This hijama is a nursing care of action in the nursing practice which consists of 5 phases, namely: Phase 1: Assessment, Phase 2: Nursing Diagnosis, Phase 3: Planning, Phase 4: Implementation, and Phase 5: Evaluation. The Standard Operational Procedure of Islamic hijama begins with purification (ablution) whilst reciting niyyah (the intention in one's heart to do something for the sake of Allah), "Yaa Allah, I am supplicating to you for cure" and reciting the Qur'an of surah al-Fatihah, then the patient sits half-faced. The nurse determines the point of hijama while asking the patient to recite "*Allahu huwa asyysifa*" or "*Allahu Huwasysyafi*" (Allah the Healer) and perform prickling at the designated point and cupping for 3 minutes. One Nursing Diagnosis can be 10 cupping points.

Islamic Hijama is Spiritual Cupping Care with re-Islamisation of nursing care. As the term spiritual refers to an abstract

realm about the meaning of life and human relations with God, in SCC there are activities of purification, niyyah, and prayer. This makes the hypothalamus secrete Corticotrophins releasing factor, thus the pituitary gland secretes POMC (Poly Opiate Minerals Cortina) which is able to make the hormone glands in the body secrete balanced neuro-hormones.

The Reading the Qur'an of surah al-Fatihah to increase spirituality can make blood sugar levels normal. The effect of spiritual increase (high level of belief) on stressed people caused by physical, psychological, and environmental stressors can be calming, resulting in decreased glucocorticoids and stimulating alpha Langerhans pancreas cells to reduce the production of glucagon and regulate the impact of gluconeogenesis in the liver, thus blood sugar levels can be decreased or even back to normal.

This study was conducted to determine the effect of cupping care on blood sugar level control in type 2 diabetic

patients. In this study, the improvement rates of blood sugar level for pre-test treatment was 339,5 whilst for post-test treatment was 266,8. Meanwhile, the normal blood sugar level is 120-140 mg/dl. There was a significant difference between both pre-test and post-test treatment of Islamic hijama ( $p=0.000$ ) (Table 3, Fig. 1). The improvement rates of fasting blood sugar showed positive effect of 83%, negative effect 0%, and no effect 27%. (Table 2). This result is supported by Savvas et al. (2004) who reported that a combined training programme of strength and aerobic exercise could induce positive adaptations on glucose control, insulin action, muscular strength, and exercise tolerance in women with type 2 diabetes mellitus.

Another study that supports this current study result is by Normand et al. (2001) which stated that exercise training reduces HbA1c by approximately 0.66%, an amount that would be expected to reduce the risk of diabetic complications significantly. Cupping care reduces the glycated haemoglobin and fasting blood sugar level, yet there is no change in post prandial blood sugar in cupping care in noninsulin dependent diabetes mellitus patients. It was also shown that

participation in cupping care with increased belief reduces the blood sugar level, fasting blood sugar, and post prandial blood sugar in type 2 diabetes mellitus patients more than spiritual only.

The revival of Islamic hijama as a Sunna Sahih hadith Muhammad PBUH "*had been cupped and who had cupped him*". He ordered that Abu Thaibah to give two cuppings (wet and dry). In the intersection of Complementary Alternative Nursing in the Indonesia context is provided a good example of the nursing process of science. As I have discussed, the growing demand for Islamic hijama among Muslims in Indonesia is in a dynamic relationship with various factors, including transnational developments such as the growing market of complementary and alternative nursing and the increased interest among Muslims who live according to the Sunna. These developments are historically situated and provide a new scenario that favours the development of Islamic nursing practices in contrast to previous historical moments where religion had to be primarily enacted as scientific and thus following the logic of modern Western science separated from everything religious.

## CONCLUSION

This shift towards a re-Islamisation of complementary nursing was becoming apparent in the private complementary sector at the time of my fieldwork and, more recently, it has also reached official representations seeking to promote complementary nursing in Muslim contexts. What Islamic hijama suggests is that the re-Islamisation of complementary

nursing should not be quickly over-interpreted as the product of an Islamisation or Arabisation of Muslim societies in Indonesia, but it also has to be understood in the context of competitive local and global markets where state interests seem to be as important as private interests. The revival of Islamic hijama and the re-Islamisation of complementary nursing

Indonesia remind us that we cannot isolate nursing or religious practices from the broader contexts in which they exist. Besides, in order to understand the dynamics of Muslim societies we need to look way beyond Islam. Furthermore, the

case of Islamic hijama also demonstrates clearly once again that nursing practices require study beyond nursing terms regarding their efficacy or healing power, but also in terms of the contexts in which these are accepted or rejected.

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