



Comparison of the management of type-2 diabetes mellitus using syzygium jambolanum mother tincture with homoeopathic medicines against uranium nitricum 4X with homoeopathic medicines

Dr. Harshna Goti^{1*}, Dr. Radha Mangukiya¹, Dr. Nidhi P Joshi²

¹ Assistant Professor, Department of Repertory, Vidhyadeep Homeopathic Medical College & Research Center, Vidhyadeep University, Surat, Gujarat, India

² Professor, Department of Forensic Medicine and Toxicology, Jay Jalaram Homoeopathic Medical College and Hospital, Morva (Rena), Godhara, Gujarat, India

Abstract

Background: Worldwide, in both industrialised and developing nations, the prevalence of diabetes was rising quickly. Recent projections show that diabetes prevalence in India is alarmingly rising, moving from an epidemic to a pandemic state.

Objectives: To compare the effects of Syzygium Jambolanum mother tincture with other homoeopathic medicines as an add-on therapy to Uranium Nitricum 4X and other homoeopathic medicines on changes in blood sugar levels and clinical symptoms in diabetic patients, to determine the efficacy of Syzygium Jambolanum mother tincture with homoeopathic medicines in the management of Type-2 Diabetes Mellitus, and to determine the efficacy of Uranium Nitricum 4X with homoeopathic

Methods: At the Main OPD and affiliated periphery OPD of VCT hospital, Vidhyadeep Homoeopathic Medical college & Research Centre, Vidhyadeep university, Surat, Gujarat, 40 patients with known cases of type 2 diabetes mellitus were selected, regardless of gender.

Results: In our study Male and female are Equal in Number. Maximum participants are belong to 50-70 year age Group. Prevalence of Diabetes Mellitus is more common in Rural habitat as compared to urban habitat. For Syzygium Jambolanum Q with homeopathic medicine treatment,

the t-value is 6.407. The p-value is 0.03. The result is significant at $p < 0.05$. For Uranium Nitricum 4X with homeopathic medicine treatment, the t-value is 4.1401. The p-value is 0.04. The result is significant at $p < 0.05$.

Conclusion: The results of our analysis show that both groups are successful, however Syzygium Jambolanum mother tincture combined with homoeopathic medications is more effective than Uranium Nitricum 4X combined with homoeopathic medicines.

Keywords: Uranium nitricum 4X, type-2 diabetes mellitus, syzygium jambolanum q

Introduction

Hyperglycemia caused by abnormalities in insulin secretion, action, or both characterises the group of metabolic illnesses known as diabetes mellitus [1]. An abnormality in the synthesis of insulin can come from both environmental and genetic factors, and the lack of insulin that results in anomalies in the metabolism of carbohydrates, proteins, and lipids [2]. Due to the prolonged duration of the defective diabetic metabolism, diabetes mellitus is usually linked to the development of microvascular and macrovascular disorders, including nephropathy, retinopathy, neuropathy, and cardiovascular diseases [3,4].

Normally, diabetes mellitus affects persons over 60, but in sub-Saharan African nations, it primarily affects people between the ages of 30-45, when they are most economically active. In African societies, the prevalence of diabetes mellitus is rising as a result of high urban growth rate, unhealthy dietary changes, physical inactivity and increasing obesity [5]. The long term complications of diabetes mellitus and the rising prevalence of diabetes mellitus in Africa will lead to economic and health system strain due to limited resources [6].

By 2035, the number of persons with diabetes mellitus is expected to increase to 592 million worldwide, according to the International Diabetes Federation (IDF). In 2014,

diabetes mellitus claimed 4.9 million lives worldwide, and one person passes away from the disease every 7 seconds. Because of the rising financial expenditures and illness burden brought on by the cardiovascular consequences and co-morbidities of diabetes mellitus, the prevalence of diabetes mellitus is an issue that concerns people all over the world [7].

The purpose of the study is to compare how Syzygium Jambolanum mother tincture and other homoeopathic medicines affect diabetic patients' blood glucose levels and clinical symptoms in order to determine whether Syzygium Jambolanum mother tincture and other homoeopathic medicines are more effective than Uranium Nitricum 4X in treating Type-2 Diabetes Mellitus.

Materials and methods

This study was conducted at Main OPD and attached periphery OPD of VCT hospital, Vidhyadeep Homeopathic Medical college & Research Center, Vidhyadeep university, Surat, Gujarat from Nov 2022 to April 2023.

Study includes total 40 participants. These were the diagnosed cases of Type II Diabetes Mellitus where they had clinical symptoms of Diabetes along with other symptoms.

Sampling method and size

Total 40 patient included my study after considering the inclusion and exclusion criteria. The patient divided into two group by simple random sampling method with the help of generate random number table from www.randmizer.org.

In these we used Quota Sampling Technique for collection of data, further patients were divided into two groups according to Simple Randomised Technique, Group 1 was given Syzygium Jambolanum Q with Homoeopathic medicines and Group 2 given Uranium Nitricum 4X with Homoeopathic medicines.

This study was single blind study, so patient does not know they take which medicine.

Criteria for the diagnosis of diabetes mellitus 1, 2

Symptoms of diabetes plus random blood glucose concentration -11.1 mmol/L (200 mg/dL) or Fasting plasma glucose -7.0 mmol/L (126 mg/dL) or Two-hour plasma glucose -11.1 mmol/L (200 mg/dl) during an oral glucose tolerance test.

Inclusion criteria

Patients with known case of Type-2 Diabetes Mellitus under age 30 to 70 years irrespective of gender were included in the study

Exclusion criteria

Patients with malignancy, history of type 1 diabetes mellitus, bedridden, pregnancy were excluded.

Outcome assessment

In this study we used the before and after (Pre and Post test study design) assesment of Fasting, Post

Prandial blood sugar and HbA1C from standard laboratory

Statistical analysis

Both descriptive and inferential statistics were used. In order to test our Hypothesis, we used unpaired t test to know the effectiveness of both medicines by using online student t test calculator. p value less than 0.05 consider as a significant.

Results

Study includes total 40 participants. patients were divided into two groups according to Simple Randomised Technique, Group 1 was given Syzygium Jambolanum Q with Homoeopathic medicines and Group 2 given Uranium Nitricum 4X with Homoeopathic medicines.

In my study mean age of diabetic patient was 55.86±5.5 yrs.

In our study Male and female are Equal in Number (Table 1) Maximum participants(n=23,57.5%) are belong to 50-70 year age Group. (Table 1)

Prevalence of Diabetes Mellitus is more common in Rural habitat (n=28,70%) as compared to urban habitat. (n=12,30%) (Table 1)

Table 1: Sociodemographic feature of participants

	Group 1	Group 2	Total
Sex wise distribution			
Male	11(55%)	9(45%)	20(50%)
Female	10(50%)	10(50%)	20(50%)
	21	19	40(100%)
Age wise distribution (year)			
30-50	03(14.28)	04(21.05%)	07(17.5%)
50-70	12(57.14)	11(55%)	23(57.5%)
>70	06(28.57)	04(21.05%)	10(25%)
Habitat			
Rural	20(71.42%)	08(28.57%)	28(70%)
Urban	07(58.33%)	05(41.66%)	12(30%)

Table 2: Results of both group according to improvement

	Group 1 (Syzygium Jambolanum Q)	Group 2 (Uranium Nitricum)
Improved	19	17
Not improved	1	3

Table 3: Pre and post treatment result comparison of both group

	Parameter	Group 1 (Syzygium jambolanum Q)	Group 2 (Uranium nitricum)	T test	P value
Before Treatment	FBS (mg/dl)	145 ± 5.60	148 ± 3.60	1.17	<0.05
	PP2BS (mg/dl)	256 ± 7.90	239 ± 8.50	0.02	<0.05
	Hba1C (%)	7.8 ± 1.0	8.0 ± 1.2	-0.17	<0.05
After treatment	FBS (mg/dl)	115 ± 4.90	125 ± 5.60	0.22	<0.05
	PP2BS (mg/dl)	210 ± 10.60	215 ± 4.50	0.80	<0.05
	Hba1C (%)	6.9 ± 1.3	7.5 ± 1.2	0.58	<0.05

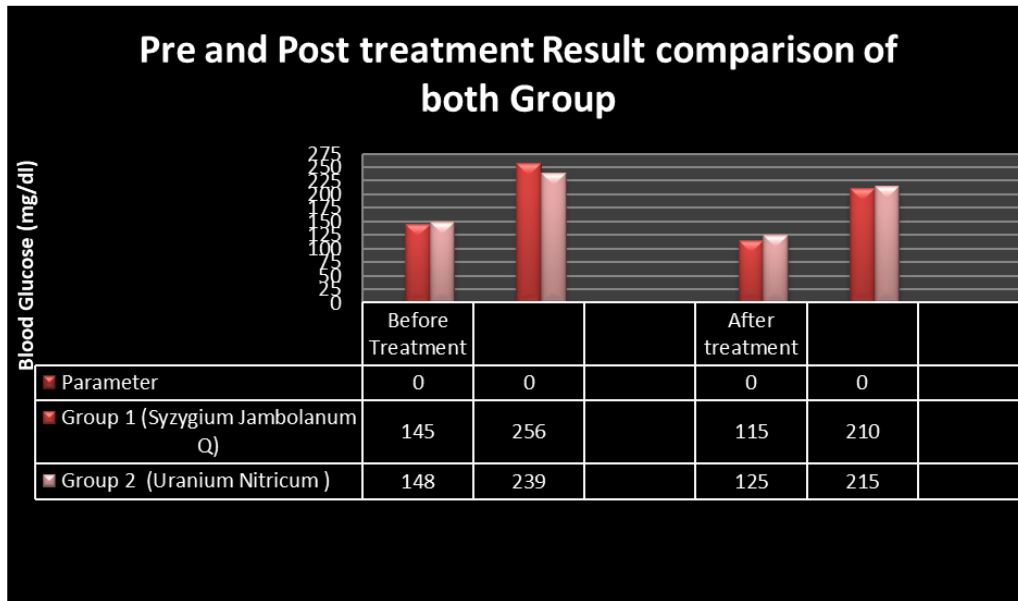


Fig 1: Coparsion of FBS and PP2BS of group 1 and group, Before and after treatment

Comparison was made using unpaired t test where the t value is 1.17. Hence it concludes that there is difference in effectiveness of both groups. (Table 2)

Further evaluation was done using paired t test where t-value is 6.407 for Syzygium Jambolanum Q with homeopathic medicines and t test value is 4.1404 for Uranium Nitricum 4X with homeopathic medicines indicating positive results towards Syzygium Jambolanum Q with homeopathic medicines.

As the paired t test value is 6.407 and improved percentage is 90.30% for Syzygium Jambolanum Q with homeopathic medicines, it indicates its effectiveness in diabetic patients. (19 patients) As the paired t test value is 4.1404 and improved percentage is 88.45% for Uranium Nitricum 4X with homeopathic medicines, it indicates its effectiveness in diabetic patients. (17 patients)

For Syzygium Jambolanum Q with homeopathic medicine treatment: The t-value is 6.407. The p-value is 0.03. The result is significant at $p < 0.05$.

For Uranium Nitricum 4X with homeopathic medicine treatment: The t-value is 4.1401. The p-value is 0.04. The result is significant at $p < 0.05$.

As the result shows the greater t value in the Syzygium Jambolanum Q with homeopathic medicines, hence it is more effective than the Uranium Nitricum 4X with homeopathic medicines.

Discussion

According to Dr. Hahnemann, the vital force, an energy that is responsible for the body functioning normally and coordinating its defences against disease, is a part of every living thing. Illness arises when the vital force is harmed by stress, a poor diet, inactivity, or environmental disturbances. The vital force's attempt to preserve balance and restore order is manifested externally as disease symptoms [8, 9]. Type 2 diabetes mellitus is a chronic condition that causes severe disturbances in the patient's vital forces. A greater comprehension of the complete illness process is needed to adapt each patient's stage of disease in a chronic state. A thorough homeopathic case taking procedure will identify the patient's deeper illness, allowing for the selection of a deeper acting treatment. i.e. the patient's simillimum can be

selected. Such a method would take into account the patient's unique disease stage as well as the patient's sensitivity as a result of the disease stage. The patient's sensitivity fluctuates depending on their state of health, how they respond to outside stimuli, the severity of their illness, and whether they take any allopathic medications or supplements [10].

In our study, we took into account a population of people with K/C/O Type 2 Diabetes Mellitus aged 30 to 70, regardless of age group. The fact that there were an equal number of men and women in our study group of 40 patients shows that Type 2 Diabetes Mellitus affects both sexes equally. The most prevalent age range for affected individuals was 50 to 70 years. The cases were documented using our case recording system, and medications were administered in accordance with that. Four patients had their overall BSL levels under control with only homeopathic treatments, while four other patients had their allopathic dosage reduced. One patient's BSL level was such that her homeopathic medications had to be stopped and she was kept on SOS as a result of our findings. We had total 40 cases in which 36 cases are substantially improving, 4 cases ever deteriorating. Given that Type 2 diabetes is a chronic lifestyle illness, a longer research period could be used to regulate BSL. By comparing or examining the case series and boosting the potencies of both homeopathic medicines, additional research might be conducted. The patient's food disturbance caused the BSL to fluctuate on and off, making it challenging to maintain. Since it was a laborious process to follow up with the patient, many cases were abandoned for this reason. For follow-up, we had to call the patient.

Results may be influenced by the effects of a small sample size on variables including statistical power, external validity, sampling error, and possibility of biased data. Therefore, a larger sample would be appropriate for this investigation. Patients' disease severity may have an adverse effect on the study by causing statistical outliers and skewed data. Data that were more regularly distributed may have come from a larger sample. The viability of such a study is in doubt due to budgetary and time constraints as well as issues with patient compliance and commitment, even if a high sample size is theoretically ideal.

Conclusion

The results of our analysis show that both groups are successful, however Syzygium Jambolanum mother tincture combined with homoeopathic medications is more effective than Uranium Nitricum 4X combined with homoeopathic medicines.

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Authors contribution

All authors have equally contributed in this study.

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Conflict of interest

None

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