

Knowledge On Importance Of Yoga Therapy Among Type II Diabetic Adults Of Mirza, Kamrup(R), Assam: A Descriptive Study

Darshana Hazarika^{a,b}, Imran Khan^c, Mangala Lahkar^d

^aResearch Scholar, School of Nursing Sciences and Research , Sharda University, Greater Noida, Uttar Pradesh

^bAssistant Professor, NEMCARE institute of Nursing Sciences, Guwahati, Assam, India

^cAssociate Professor, School of Nursing Sciences and Research ,Sharda University, Greater Noida, Uttar Pradesh

^dOSD cum Professor, Srimanta Sankaradeva University of Health Sciences, Guwahati, Assam

*Corresponding Author:

Darshana Hazarika

Assistant Professor, NEMCARE institute of Nursing Sciences

Email ID: darshanahazarika558@gmail.com

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ABSTRACT

Introduction: The frequency of type 2 diabetes mellitus, a chronic metabolic illness, has been gradually rising. Yoga is a traditional mind-body system originating in India over 4000 years ago. People who were aware of the complication of diabetes and practicing healthy behaviour can suffer less

Aim and objective: This study attempts to evaluate the level of knowledge among adults with diabetes mellitus regarding the effectiveness of yoga therapy in managing the condition.

Methodology: Quantitative descriptive design was adopted in present study. . Total 200 type I diabetic adults were selected from Mirza community of Kamrup(R) ,Assam through purposive sampling technique.

Results: Out of 200 type II diabetic adults, 33(16.5%) of the adults had adequate ,130 (65%) had moderately adequate and 37(18.5%) had knowledge on importance of yoga therapy. There was no association between knowledge on importance of yoga therapy with demographic characteristics like age like age($p=.868$), gender($p=.842$), educational qualification($p=.$), family history of diabetes mellitus($P=.918$), duration of confirmed diabetes mellitus($p=.245$), food habit($p=.835$), habit of smoking($p=.935$)and alcoholism($p=.980$) performed regular exercise($p=.671$)and attended training /programme on yoga therapy($p=.854$)

Conclusion: Present study found that most of the type 2 diabetic adults had moderately adequate knowledge on importance of yoga therapy. In future there is a scope to conduct more research on knowledge as well as practice of yoga therapy in management of type 2 diabetes mellitus with large sample size.

Keywords: Knowledge, yoga therapy, type 2 diabetes mellitus, adults

1. INTRODUCTION

Type 2 Diabetes mellitus is a chronic metabolic disorder in white increase in by each passing day. It is characterized by a combination of peripheral insulin resistance and inadequate insulin secretion by pancreatic beta cells(1).Lifestyle factors such as sedentary lifestyle, cigarette smoking, consumption pf alcohol stress, eating high fatty diet etc are known to be the cause of development to type 2 Diabetes mellitus. Several People living with type 2DM is more vulnerable to various forms of both short- and long-term complications, which often leads to permanent death(2). Prolonged hyperglycemia can contribute to serious complications and organ dysfunction, particularly in the kidney, blood vessels, and eyes. Long-term consequences of diabetes include peripheral neuropathy, which increases the risk of foot ulcers and Charcot joints, nephropathy, which can result in renal failure, retinopathy, which can cause vision loss, and autonomic neuropathy, which can cause symptoms related to the gastrointestinal tract, genitourinary system, cardiovascular system, and sexual dysfunction(3). Yoga is an ancient mind-body practice that dates back more than 4,000 years to India. Over the past few decades, yoga has become more and more popular worldwide, in both developed and developing nations. (4).

The people residing in India usually have high acceptability of Yoga as it fits their health beliefs, practice and culture. Generally, it uses a gentle approach, is easy to learn, is safe, requires a low to moderate level of guidance, is inexpensive to maintain, and can be practiced indoors and outdoors(5).It is recommended that people with diabetes mellitus can practice yoga twice a week for 60 minutes each time(6).Exercise or physical activity has several advantages for people with diabetes mellitus, including lowering blood glucose levels, preventing obesity, overcoming complications, improving blood pressure, and conquering blood lipid abnormalities.(6)(7)According to multiple studies, the best asanas for lowering blood sugar levels include Ardhamatsyendrasana, Pranayama, Pavanamuktasana, Shashankasana, Madukasana, Halasana, and Vakrasana. (8–10)Herath HMM et al -reputed that the majority (77%) had moderate and (39%)have above moderate knowledge on diabetes mellitus(11).

Most of the study revealed that the people who were aware of the complication of diabetes and practicing healthy behaviour can suffer less .In order to prevent and control type 2 Diabetes mellitus in its early stages of life, this study attempts to determine the level of awareness among adults with diabetes mellitus regarding the effectiveness of yoga therapy in managing the condition.

Objectives:

Objectives of the study are:

- 1.To assess the Knowledge on importance of yoga therapy among type II diabetic adults
- 2.To determine the association between Knowledge on importance of yoga therapy with their selected demographic characteristics.

2. METHODOLOGY

Quantitative descriptive design was adopted in present study. Total 200 type I diabetic adults were selected from Mirza community of Kamrup (R) ,Assam through purposive sampling technique. Tool used for collecting data consists of two sections. Section A consist of demographic characteristics and section B include knowledge questionnaire to evaluate the knowledge on importance of yoga therapy among type II diabetic adults.

Statistical analysis

All the statistical analyses were carried out by using Statistical Package for the Social Sciences (version-16) IBM SPSS Statistics for Windows, Version 16.0. Frequency and percentage distribution were used to analyse the demographic characteristics. Mean, median, and standard deviation were used to assess the knowledge on importance of yoga therapy among type II diabetic adults. Association between Knowledge on importance of yoga therapy with their selected demographic characteristics were analysed by using chi-square test.

3. RESULTS

Among the adults 64(32%) were between the age group of 30-40 yrs,96(48%)were between 41 -50 years and 40(20%) were between 51-60 years. Most that is 114(57%) were male and 86(43%)were female. In terms of participant educational qualification 16(8%) of the adults were having no formal education,18(9%) have completed primary education,32(16%) have completed higher secondary and 66(33%) have completed graduation and above. Most i.e. 104(52%) had family history of diabetes mellitus and96(48%) didn't have the family history of diabetes mellitus. Majority i.e. 166(83%) had duration of confirmed diabetes mellitus less than 5 years,22(11%) had duration of 5-10 years and 12(6%) had duration more than 6 years. Most that is 132(66%) were nonvegetarian and 68(34%) were vegetarian. Majority that is 182(91%) were non-smokers and only 18(9%) were smokers .Most i.e. 150(75%) were non-alcoholic followed by 50(25%) alcoholic. Most i.e. 146(73%)were not performing regular exercise and 54(27%)were performing regular exercise. Most i.e. 142(71%) had not attended and 58(29%) had attended training /programme on yoga therapy. Data presented in Table 2 revealed that among the type II diabetic adults mean knowledge score was 6.94, median7 and SD 1.47. Data presented in fig 1 reveals that 33(16.5%) of the adults had adequate ,130 (65%) had moderately adequate and 37(18.5%) had knowledge on importance of yoga therapy . Data presented in table 3 revealed that there is no association between knowledge on importance of yoga therapy and demographic characteristics like age($p=.868$), gender($p=.842$), educational qualification($p=$), family history of diabetes mellitus($P=.918$), duration of confirmed diabetes mellitus($p=.245$), food habit($p=.835$), habit of smoking($p=.935$)and alcoholism($p=.980$) performed regular exercise($p=.671$)and attended training /programme on yoga therapy($p=.854$)

Table1 : frequency and percentage distribution of demographic characteristi
n=200

Demographic characteristics	(f)	(%)
1. Age		
a) 30-40	64	32%
b) 41-50	96	48%
c) 51-60	40	20%
2. Gender		
a) Male	86	43%
b) Female	114	57%
c) Transgender	0	0%
3. Educational qualification		
a) No formal education	16	8%
b) Primary school	18	9%
c) Middle school	0	0%
d) High school	0	0%
e) Higher secondary	32	16%
f) Graduation and above.	66	33%
4. Family history of DM		
a) Yes	96	48%
b) No	04	52%
5. Duration of confirmed DM		
a) <5	166	83%
b) 5-10	22	11%
c) >10	12	6%
6. Food habit		
a) Vegetarian	68	34%
b) Nonvegetarian	132	66%
7. Do you smoke?		
a) Yes	18	9%
b) No	182	91%
8. Do you consume alcohol?		
a) Yes	50	25%
b) No	150	75%
9. Do you perform regular exercise?		
a) Yes	54	27%
b) No	146	73%
10. Have you ever attended any training/programme on yoga therapy.		
a) Yes	58	29%
b) No	142	71%

Table 2: Mean, Median and Standard deviation (SD) of knowledge score

n=200

Mean	Median	SD
6.94	7	1.47

Table:3: association between Knowledge on importance of yoga therapy with their selected demographic characteristics.

n=200

Sl.No	Demographic Characteristics	Df	'p' value	Remarks
1.	Age	12	.868	NS
2.	Gender	6	.842	NS
3.	Educational qualification			NS
4.	Family history of DM	6	.918	NS
5.	Duration of confirmed DM	12	.245	NS
6.	Food habit	6	.835	NS
7.	Do you smoke	6	.935	NS
8.	Do you consume alcohol	6	.980	NS
9.	Do you perform regular exercise	6	.671	NS
10.	Have you ever attended trading /programme on yoga	6	.854	NS

Significant at $p < 0.05$

Ns=non-significant

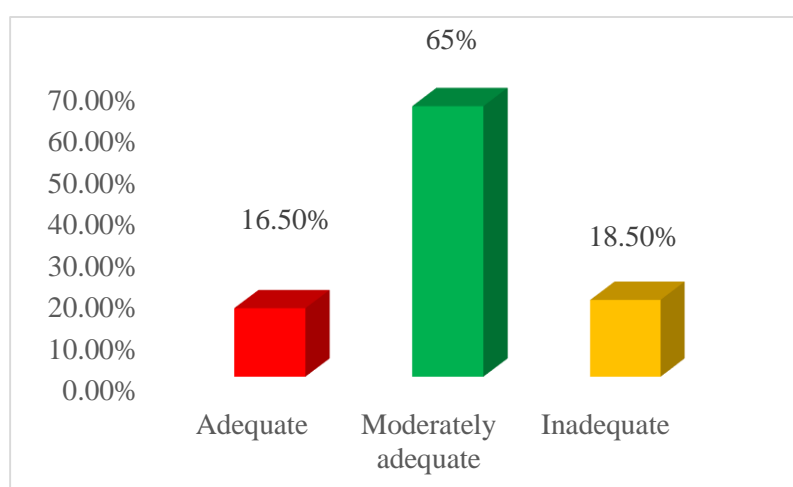


Fig1: Percentage distribution of knowledge on importance of yoga therapy among type II diabetic adults.

4. DISCUSSION

Present study finding revealed that 33(16.5%) of the adults had adequate, 130(65%) had moderately adequate and 37(18.5%) had inadequate knowledge on importance of yoga therapy. The finding of the study is consistent with finding of the study reported by Beevi S, et al in which 36.1% were Adequate 16.7% were moderately adequate and 47.2% Inadequate regarding yoga practise and its benefit(12).

In a study by Kumar P N et al., 74.7% of participants claimed that doing yoga had health advantages; 62.4% said that doing yoga can help avoid diabetes; and 59% said that doing yoga can assist manage type 2 diabetes and prevent complications (13)

There were some limitations in the current study. This study used only knowledge regarding yoga therapy but their attitude and practice were not assessed, which are suggested for further studies. In future study regarding effect of yoga therapy on diabetic person can be recommended.

5. CONCLUSION

The present study, conducted within the Mirza community of Kamrup(R), Assam, reveals insightful findings on the awareness levels regarding the efficacy of yoga therapy among adults suffering from type 2 diabetes mellitus. With a sample size of 200 individuals, the results demonstrate a significant inclination towards moderate awareness, with 65% of participants possessing moderately adequate knowledge about the role of yoga in managing their condition. Interestingly, a smaller fraction, 16.5%, exhibited a comprehensive understanding, while 18.5% were found to have inadequate knowledge on the subject.

The results highlight a critical window of opportunity for policymakers, practitioners, and health educators to step up efforts to support yoga as an effective supplemental treatment for type 2 diabetes mellitus. Even while most people have a moderate level of knowledge, there is a clear gap in comprehensive understanding, which emphasizes the necessity for focused educational initiatives. Encouraging the practical use of yoga therapy and deepening understanding of the subject matter should be the goals of these programs, as they have the potential to improve general health and improve diabetes management. The results of this study can be used to establish benchmarks for diabetes awareness and to create diabetes education initiatives. To find out how informed and knowledgeable pre-diabetic persons are about early diabetes management, the same study might be conducted again with them.

6. DECLARATION

Ethics approval and consent to participate

This study was approved by the institutional ethical committee, NEMCARE Group of Institutions, Mirza, Guwahati, Assam, India. Informed consent was obtained from all participants.

Consent for publication

Not applicable.

Availability of data and materials

All data relevant to the study are included in the article.

Competing interests

There are no conflicts of interest.

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Authors' contributions

All authors reviewed the manuscript and contributed to and approved the final submitted version.

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