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Shiji George
BSc. Nursing Students,
Bharati Vidyapeeth Deemed
University College of Nursing,
Pune, Maharastra, India

Akhila Valsan Abraham
BSc. Nursing Students,
Bharati Vidyapeeth Deemed
University College of Nursing,
Pune, Maharastra, India

Ankit Goyal
BSc. Nursing Students,
Bharati Vidyapeeth Deemed
University College of Nursing,
Pune, Maharastra, India

Jitesh Dorkar
BSc. Nursing Students,
Bharati Vidyapeeth Deemed
University College of Nursing,
Pune, Maharastra, India

Prateek Barari
BSc. Nursing Students,
Bharati Vidyapeeth Deemed
University College of Nursing,
Pune, Maharastra, India

Vaishali Gaikwad
Clinical Instructor, Community
Health Nursing, Bharati
Vidyapeeth Deemed University
College of Nursing, Pune,
Maharastra, India

Assess the knowledge regarding home remedies for diabetes mellitus among diabetic patients

Shiji George, Akhila Valsan Abraham, Ankit Goyal, Jitesh Dorkar, Prateek Barari and Vaishali Gaikwad

Abstract
Global prevalence of diabetes for all age-groups worldwide was estimated to be 2.8% in 2000 and 4.4% in 2030. The total number of people with diabetes is projected to rise from 171 million in 2000 to 366 million in 2030. According to the latest 2016 data from WHO 422 million adults having diabetes mellitus. Currently diabetes affects more than 62 million Indians which more than 7.1% of the adult population. The prevalence of diabetes is higher in men than women, but there are more women with diabetes than men. Murraya Koenigii (Curry leaves) is one such medicinal plant which is being explored for its controlling blood sugar level of diabetes patients. The uses of home remedies will reduce the diabetes in the individual. And it has no any side effects. The uses of aloe vera, bitter guard, goose berry etc., will reduce diabetes.

The present study title: "Home remedies for diabetes mellitus among diabetic patient." The objective of the study was to identify, to assess the knowledge regarding home remedies of diabetes mellitus among patient; and to associate findings with selected demographical variables. The objective of the study was, to assess the knowledge regarding home remedies of diabetes mellitus among patients, to associate findings with demographical variables.

Material and methods: In present study, researcher adopted quantitative approach. It was carried out on 80 patients. The Non-probability purposive sampling technique was used to select patients for Diabetic patients in the age group above 35-65years.

Result: The demographic characteristics shows that the majority 45 (56.25%) were are female, 21(26.25%) patients belongs to age group 56 to 60 and, 41(51.25%) patients are in nuclear family, 40 (50%) of the patients are other specify (self-business, unemployed, housewife), 29(36.25%) patients are secondary educated, 29 (36.25%) have diabetes since 1 year and 53(66.25%) patients have insulin dependent diabetes mellitus.

Conclusion: from the above research, we conclude that the patients have adequate knowledge about home remedies for diabetes mellitus.

Recommendation: Similar study can be studied in different setting with large population. A further researches can carried out in specific type of home remedies. Different study can be done.

Keywords: Home remedies, diabetes mellitus, diabetic patients

Introduction

Diabetes Mellitus is a disease that increased glucose level in the blood. Continuous urination, enhanced dehydration and increased need for food are features of increased blood sugar level. If the diabetes is not treated it can cause many complications like DKA, HHS. CVD, CKD, sore in leg and harm for eye are also included in the severe complication of diabetes. The reason for diabetes is lack of production of insulin. Mainly, present 3 types of diabetes, type I diabetes occurs because of less manufacture of insulin inside pancreas. It is known even as insulin dependent diabetes mellitus or juvenile diabetes. The source of type 1 is unidentified. A situation within the cell be unsuccessful toward react insulin correctly it is known like Type 2 DM. While illness progress the absence of insulin might grow. The extreme body weight and lack of work out are most common reason of type II Diabetes mellitus. The third type of Diabetes mellitus is Gestation Diabetes mellitus. It occurs at the conceived women with no any earlier histories of diabetes build up in increasing Blood Sugar level. Maintain a fine food, systematic physical activity, a standard body weight along with avoid make use of tobacco, these are the methods for prevention and treatment. The people with this disease are important for manage the Blood Pressure and foot care. The type1 diabetes mellitus is handled by Insulin injection; through medications Type II diabetes can be treated by medication are used for lowering the blood sugar level. [1]

Correspondence
Shiji George
BSc. Nursing Students,
Bharati Vidyapeeth Deemed
University College of Nursing,
Pune, Maharastra, India

According to the latest 2016 data from the WHO 422 million adults having diabetes mellitus. 90% of the cases are represent 8.3% of adults are suffering from Type II diabetes mellitus. In India at present, above sixty two millions are affected, it's more than 7.1% of the adult. Every year almost One million Indians are dying as a result of diabetes. A Diabetes Association in America report that on 2030 there might be a increased in people diagnosed with diabetes [2].

The goal of diabetes management to remain sugar level in blood while adjacent to normal. Blood pressure and cholesterol levels are also essential section of diabetes management. It contains dietary management, examine of blood sugar level, maintenance weight and strain beneath control. Healthy carbonates, sugar and starches are helps in absorption. All parts of plant foods included in the dietary fibre can't absorb by the body. High fibre content is present in vegetarian foods, dry fruits. Atleast two days in a week eat fish [3].

In Insulin therapy, to maintain insulin levels in Type 1 diabetic patient multiple insulin injection is required in every day. The Type 2 diabetes is also treating with insulin. In Oral medication, the sugar level in blood left over more in patients with Type II diabetes. Medication works in various method, it enhance the power of natural insulin in the body, decrease in manufacture of sugar in blood, enhance the making of Insulin as well as restrain taking up of sugar in blood. Through home remedies about diabetes mellitus. Like aloe vera, bitter melon, cinnamon, fenugreek etc. we can control diabetes without any side effects. Also it is easily available in the house at any time of emergency [4].

Need of the Study
The latest estimates show prevalence in India of 69.2 million persons accompanied by Diabetes during two thousand fifteen, estimated to go upon 123.5 million in two thousand forty, a rise of 78%. According to 2017 survey in India, prevalence diabetes mellitus in India is more or 72 million which is 20.3% of Indian population and is topped in India. Diabetes mellitus refers to a group of disease affects how the body uses the blood sugar (glucose). Increased level of sugar in the blood leads to serious health problem.

There are many allopathic treatment are available to treat diabetic mellitus, but they have different side effect and complications related to cardiovascular system, genitourinary system. As compare to it, Ayurvedic medicine have lesser or no side effect which can be easily available or can be Make at home which is called as home remedies. In allopathic treatment, insulin administration, oral medication, pancreas transplantation etc. are included. Healthy diets, low-fat dairy products, aloe vera, gooseberry, bitter melon, cinnamon, fenugreek etc. can use as home remedies to control the blood sugar level and it is easily available in the house at emergency condition.

As India is topped country in the world for the case of diabetes mellitus. There is need to bring awareness in people about diabetes mellitus then they can prevent and manage the following the early stage at home. As initial researches estimated the 5.4% of Indian population will be affected by the diabetes they can manage it for longer duration of time and with diabetes they can live like normally healthy persons. In bitter gourd, it is rich in insulin-polypeptide-P which has the ability of reduce hyperglycaemia and also contain two essential compound called charatin and momordicin which have the ability to lowering the blood sugar level. Gooseberries are rich in vitamin C and it helps the pancreas to produce optimum and remains the blood glucose level balanced. Cinnamon contains antioxidants that decrease oxidative stress. It helps in lowering blood sugar level by acting like insulin and increasing insulin ability to move blood sugar into cells. Aloe vera is anti-diabetic effects it reduce the blood sugar level. Curry leaves helps blood sugar levels by affecting the insulin activity and reduce the blood sugar level. Neem leaves contain flavonoids, triterpenoid, anti-viral compounds and glycosides, which helps in manage blood sugar level.

According to the study on 2015, the prevalence of diabetes among the population was 10.5%. The prevalence of diabetes increasing in poor, illiterate population.

Objectives of the study
- To assess the knowledge regarding home remedies of diabetes mellitus among patients.
- To associate findings with selected demographical variables.

Methodology
A non-experimental descriptive study research design was adopted to conduct the study among 80 diabetic patients admitted in medical ward from selected hospitals of Pune city with non- probability purposive sampling technique.

Sample Criteria
Inclusion Criteria
- Diabetic patients admitted in medical ward in selected hospitals of Pune city.
- Patients of age group 35-65 yrs.

Exclusion Criteria
- Patient who have diagnosed with diseases other than diabetes.

Description of Tool
Section I: Demographic data: Age, Gender, Family type, Education, Occupation, Duration of illness, Type of diabetes.

Section II:
➢ Structured knowledge questionnaire
➢ The questionnaire will be scored into three categories as:
   - **Poor:** 0- 7
   - **Average:** 8- 14
   - **Good:** 15 – 20

Section III: Association between demographic variables.
Results: 80 diabetic patients were selected for data collection from selected hospitals of Pune city.

Section I

Table 1: Distribution of sample based on demographic variables. n=80

Sr. no.	Demographic Characteristics	Frequency	Percentage
1.1	**Gender**		
	Male	35	43.75%
	Female	45	56.25%
1.2	**Age in years**		
	35-40 year	6	7.50%
	41-45 year	14	17.50%
	46-50year	19	23.75%
	51-55 year	11	13.75%
	56-60 year	21	26.25%
	60 years and above	9	11.25%
1.3	**Family type**		
	Nuclear family	41	51.25%
	Joint family	39	48.75%
1.4	**Occupation**		
	Government service	8	10%
	Private service	32	40%
	Other specify (Self-business, Unemployed, Housewife)	40	50%
1.5	**Education**		
	Primary education	15	18.75%
	Secondary education	29	36.25%
	Junior college	24	30%
	Graduate	10	12.50%
	Post-graduate	2	2.50%
	Other	0	0
1.6	**Duration of illness**		
	Recently diagnosed	11	13.75%
	Past 1 year	29	36.25%
	1-5 year	22	27.50%
	More than 5 year	18	22.50%
1.7	**Type of diabetes**		
	Insulin dependent diabetes mellitus	53	66.25%
	Non-insulin dependent diabetes mellitus	23	28.75%

Table No. 1 shows the description of samples based on their personal characteristics

1.1 Shows that majority 45(56.25 %) were female.
1.2 Shows that majority 21(26.25%) patients are belongs to age group of 56 to 60
1.3 Shows that majority 41 (51.25%) patients are in nuclear family
1.4 Reveals that majority 40(50%) of the patients are self-workers
1.5 Shows that majority patients 29 (36.25%) are secondary educated.
1.6 Reveals that majority 29 (36.25%) patients have diabetes since 1 year.
1.7 Shows that 53(66.25%) patients have insulin dependent diabetes.

Section II

Table 2: Distribution of data based on knowledge of diabetic patients about home remedies of diabetes mellitus. n=80

Knowledge	score	Frequency	percentage
Poor	0-7	0	0%
Average	7-14	27	33.75%
Good	15-20	53	66.25%

Table no 2 shows that the knowledge of diabetic patient about home remedies of diabetes mellitus. This table shows that 66.25% patients have good knowledge and 33.75% patient has average knowledge.

Section III

Table 3: Association between demographic variables.

	Variables	Df	fisher's exact	p value	remark
1.	Gender	2	1.875901876	0.39142908	NA
2.	Age in years	10	8.061989293	0.62278186	NA
3.	Family type	2	2.100308363	0.3498838	NA
4.	Occupation	4	3.546863437	0.47078853	NA
5.	Education	10	7.297055576	0.8373748	NA
6.	Duration of illness	6	5.37224671	0.49702989	NA
7.	Type of diabetes	4	1.011734607	0.90801145	NA

Table No. 3 shows that there is no any association in age, gender, family type, occupation, and education, duration of the illness and in type of diabetes.

Discussion
Section 1
The data given in table 1 shows that 45 (56.25%) were

female, 21(26.25%) patients are belongs to age group 56 to 60 yrs, where 41 (51.25%) are nuclear family, 40 (50%) are other specify (self-business, unemployed, house wife), 29 (36.25%) of them have secondary education, 29(36.25%)of the patients have diagnosed for diabetes in past 1 year, 53(66.25%) of the patients have insulin dependent diabetes mellitus.

Section 2
The data given in table number.2 shows that 53(66.25%) were have good knowledge and 27(33.75%) were have average knowledge regarding home remedies of diabetes mellitus.

Section 3
The data given in table number 3 shows that there is no any association between demographic variables.

Conclusion
The research study findings shows significant difference between knowledge regarding home remedies of diabetes mellitus among diabetic patients in medical wards.
Hence, on the basis of above findings, it could be concluded that the selected patients of medical ward have adequate knowledge regarding home remedies of diabetes mellitus.
According to validity and reliability of the tool is suggested that tool is reliable. The pilot study was conducted on 10 patients in medical wards to check the feasibility of the tool. The tool was feasible.

Limitation
- A limited time was available for data collection.

Recommendation
- Similar study can be studied in different setting with large population.
- A further researches can carried out in specific type of home remedies.
- Different study can be done.

References
1. BB Tripathy, Hemraj B Chandalia, Ashok Kumar Das, RSSDI textbook of diabetes mellitus (Rev.2nd ed.), Jaypee Brothers Medical. Publishers, 2012, 325. Available forms: https://www.Wikipedia.com.
2. Seema Abhijeet Kaveeshwar, Jon Cornwall. The current state of diabetes mellitus in India, The Australasian Medical Journal, AMJ. 2014; 7(1):45-48. Available forms: https://www.ncbi.nlm.nih.gov.
3. Dr. Regina Castro, Diabetic diet, The Essential Diabetes Book, 2nd edition, 2017. Available forms: https://www.myoclinic.org.
4. Herbal. Natural Remedies for Diabetes, 2015, Available forms: https://www.diabetes.co.uk.
5. Beteena Kurian, Rajini Ganesh, Kamalamma Leelamoni, Mariya Amin Qurieshi. A community- based study on knowledge of diabetes mellitus among adults in rural population of Kerala, DOI: 10.5455/ijmsph.2016.30012016417, 2016. Available forms: https://www.researchgate.net/publication/302067555.
6. Sumanpreet Kaur, Harmanpreet Kaur. A descriptive study to assess the knowledge regarding diabetes mellitus among the residents of selected rural community, DOI:10.5958/2454-2660.2017.00005.9, 2017.
7. Arnab N Patowary, Jiten H, Manash P. Barman, Assessment of knowledge and awareness towards diabetes mellitus, Internal Journal of Current Research. 2016; 8(7):34910-34915, ISSN: 0975-833.
8. Shipra S Issac. Home management of Diabetes Mellitus, International Journal of Nursing Research and Practice, EISSN. 2014; 1(1):2350-1324. January-June. Available forms: https://www.uphtr.com/IJNRP/home.
9. Rehan Tariq, Khalid Idrees Khan, Rizwan Ali Masood, Zafeer Naeem Wain, Natural remedies for diabetes mellitus, Tariq *et al*, International Current Pharmaceutical Journal, October 2016; 5(11):97-102. Available forms: https://www.icpjonline.com/documents/Vol5Issue11/02.pdf.
10. Shivcharan Singh Gandhar. A study to assess the knowledge and practice of self-administration of insulin in a view to develop self-instructional module [SIM] among patients with diabetes mellitus in selected hospitals of Pune city. International Journal of Applied Research, 2018, 4(5).
11. Shivcharan Singh Gandhar. Effectiveness of Cartoon Movies as Distracter on Pain among Children Undergoing Venipuncture. International Journal of Science and Research. 2016, 5(6).
12. Suresh K Sharma. A Comparative pilot Study to Assess the perception about Alcohol intake Among Undergraduate Students from Medical, Nursing and paramedical Courses at Selected health facilities. The Pharma Innovation Journal, 2019, 8(4).
13. Jose Luis Rios, Flavio Francini. Natural products for the treatment of Type 2 Diabetes Mellitus, Planta Med. 2015; 81:975-994. ISSN0032-0943 Available forms: https://www.researchgate.net/publication/26979793.
14. Yogita Soni, Ramchandra Mochi, Ghanshyam Gahlot. Effect aloe vera juice on diabetic and diabetic retinopathy subjects, Indian JL. Sci. 2016; 4(1):41-45. Available forms: https://www.semanticscholar.org/0fb6/42ec43abb8e1e6c0a433ed1612fc1b341377.pdf.
15. Pauline J Maddox. Cinnamon in the treatment of type II diabetes, Southern Adventist University, Graduate research projects. 2016; 79, 6. Available forms: https://knowledge.e.southern.edu/cgi/viewcontent.cgi.
16. Muhammad Shoaib Akhtar, Ayesha Ramzan. Effect of Amla fruit (Emblica officinalis Gaertn.) on blood glucose and lipid profile of normal subjects and type 2 diabetic patients, 2016.