

**2020“A STUDY TO ASSESS THE EFFECTIVENESS OF  
CURRY LEAVES MIX IN MANAGEMENT OF BLOOD  
GLUCOSE LEVEL AMONG THE TYPE II  
DIABETIC CLIENTS IN SELECTED  
URBAN AREA, KOLAR”.**



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**Research Project Submitted to**

**Sri DevarajUrs College of Nursing, Tamaka, Kolar**

**As a part of Curriculum requirement for the Degree of Basic BSc(N)**

**Under the guidance of**

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**Tamaka, Kolar**

**2020**

## **DECLARATION BY THE CANDIDATES**

We hereby declare that this research project work entitled **“A study to assess the effectiveness of curry leaves mix in management of blood glucose level among the type II diabetic clients in selected urban area, kolar”**. Is a bonafide research work carried out under the guidance Prof. Mary Minerva, Professor, Community health nursing, Sri DevarajUrs College of Nursing, Tamaka, Kolar

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## **CERTIFICATE BY THE GUIDE**

This is to certify that research project work entitled “**A study to assess the effectiveness of curry leaves mix in management of blood glucose level among the type II diabetic clients in selected urban area, kolar**”. Is a bonafide research work done by Ms. Aswathy.MH, Ms.Bindhushree, Ms.Nathiya.M, Mr.MuhammedMasiullaBaigand Ms.SonaCyriac. In the partial fulfilment of the requirement for the degree of Basic B.sc(N) .

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HOD of Department of Community Health Nursing  
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## **ENDORSEMENT BY THE HOD, PRINCIPAL/ HEAD OF THE INSTITUTION**

This is to certify that the research project entitled **“A study to assess the effectiveness of curry leaves mix in management of blood glucose level among the type II diabetic clients in selected urban area, kolar”**. Is bonafide research work done by Ms. Aswathy.MH, Ms.Bindhushree,Ms.Nathiya.M,Mr.MuhammedMasiullaBaig andMs.SonaCyriac, under the guidance of Prof. Mary Minerva of Community health nursing department, SDUCON, Tamaka, Kolar.

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Date:

## ACKNOWLEDGEMENT

**“Your positive action combined with positive thinking result in success”**

We raise our heart with profound gratitude to god Almighty for his blessings and mercies which enabled me to reach this stage and complete my study without any interruption.

The success of this study comes through the invaluable help, guidance and contribution of the faculties, seniors, friends and other well-wishers. The Investigator recalls their kindness with a grateful heart and is trying to express these gracious feelings in few words.

I wish to express my sincere thanks to Dr. G. Vijayalakshmi, Principal of, SDUCON, Tamaka, Kolar for giving vital suggestions, learning atmosphere, timely advice, constant support to complete the study

The influence of a good teacher can never be erased. Our immensely thanks to our research guide Prof.Mary Minerva, HOD of community health nursing, SDUCON, Tamaka, Kolar, who deserve respect and gratitude for guiding us to understand the theory of research encouragement and direction given at each and every step of study, which has made the study what is at present situation.

“Greater achievements come from experiences and they stand as key to successes” We express our gratitude to Mrs.Komala Devi. R, Nursing Tutor, department of community health nursing, SDUCON, for her guidance and support for the study.

Our heartfelt thanks to Mr. Ravi Shankar, Statistician, Dept. of community medicine of Sri Devaraj Urs Medical College for his guidance and valuable suggestion in statistical analysis of data.

We express our sincere gratitude to all HOD’S of various departments of Nursing and all faculties of SDUCON for their encouragement and suggestions which helped us to complete the study.

We express our sincere gratitude to **All the experts**, who have contributed the valuable suggestions in the validation of the tool.

Our special thanks to Librarians of SDUCON for their constant support and help in terms of orienting us to border range of source were appropriate literature was available.

We express our sincere thanks to all the household women for their kind co-operation throughout the study, without them it would have impossible to conduct the study.

We express our gratitude to our parents for their prayer and blessings which helped us to complete research work successfully.

Last, we would like to express our thanks to our classmates for their support throughout the study.

**Thank you very much for all your support.....**

DATE:

PLACE: KOLAR

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## **ABSTRACT**

### **STATEMENT OF THE PROBLEM**

A Study to assess the effectiveness of curry leaves mix in management of blood glucose level among the type II Diabetic clients in selected urban area, kolar”

### **OBJECTIVES OF THE STUDY**

1. To assess the pre-interventional blood glucose level of type II diabetic clients in experimental group and control group.
2. To find the effectiveness of curry leaves mix on management of blood glucose level in experimental group.
3. To differentiate pre and post-test blood glucose level in type II diabetic clients in experimental and control group.

### **HYPOTHESIS**

H1: There will be remarkable difference between pre-test and post-test blood glucose level in the experimental group.

H2: There will be remarkable association between the pre-interventional blood glucose level with selected demographic variables among the type II diabetic clients.

### **METHOD**

The research design chosen for the study was true experimental, one experimental group and one control group. The study sample consists of type II diabetic clients in urban area kolar and are selected by simple random technique. The data was collected from 40 clients by giving curry leaf mix.

## **MAJOR FINDING OF STUDY**

On comparing the pre and post blood glucoses level among type II diabetic patients in experimental group and control group, the obtained mean difference was 9.95% and 1.7% respectively. The finding implies that there is a significant difference between the pre and post-prandial blood glucose level in experimental group. Thus, the hypothesis was provide.

## **CONCLUSION**

The study was concluded with the findings that there is a significant reduction in blood glucoses level of clients in experiment group who were given 10gms of curry leaves powder for 20 days along with their food.



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## **CHAPTESR-1**

### **INTRODUCTION**

**“YOU CAN’T ENJOY WEALTH IF YOU’RE NOT IN GOOD HEALTH”<sup>1</sup>**

**-Anonymous**

Diabetes mellitus, commonly known as diabetes, is a metabolic disease that cause high blood sugar.the hormone insulin moves glucose from the blood into your cells to be stored or used for energy. withdiabetes, your body either doesn’t make enough insulin or can’t effectively use insulin it does make. Un treated high blood sugar from diabetes can damage your nerves, eyes, kidneys, and other organs.<sup>2</sup>

Physical activity improves well-being and reduces the risk of heart disease, cancer and typeII diabetic mellitus in the general population.in individuals with established type II diabetic, physical activity helps decrease glucoses and lipid levels, decrease weight and improve insulin resistance.<sup>3</sup>

According to the team London scientists, Ancient herbal remedies used for centuries in Indian cooking and in preparing dishes in far east have the potential to control diabetes and treat cancer, scientists believe that the Indian curry leaf –an ingredient in many curry dishes and used in traditional Indian healing, may contain agents that impede the rate of starch-to-glucose disintegration in people with diabetes. The tree’s leaf could manage the amount of glucose entering the bloodstream.<sup>4</sup>

Curry leaf is said to be more in fibre content. Fibre is important for slowing down digestion and doesn’t metabolise quickly. which carry’s your blood glucose in check. Curry leaftends to encourage your insulin activity and when the body is facilitating to use insulin accurately. Blood glucose levels havestabilised.<sup>5</sup>

This study mainly focus on assess the blood glucose level among the diabetic client before and after administration of curry leaf in experimental group.and theeffect of curry leaf in the reduction of blood glucose level in the clients. The curry leaf can easily available and affordable by the community people.

## NEED FOR THE STUDY

India is the diabetics capital of the world with a projected 109 million individuals with diabetics by 2035 the disease directly influence higher than 62 million Indians. Which is more than 7.15% of Indians adult population .and estimates shows that nearly one million Indian died due to diabetes every year (Indian heart association-2015)<sup>6</sup>

Worldwide diabetic cases: - In world consist of 9.3% (463 million people), rising to 10.27%(578 million), by 2030 and 10.9% (700mmillion) by 2045 In India total diabetic cases Known diabetic cases were 8.0% and new diabetic cases were 3.8%. male showed a similar Prevalence of diabetic (12%) as females (11.7%). Karnataka is of the top three states in India the elevated regularity of diabetic individuals. In Karnataka 7.5% onto prevalence of diabetics.<sup>7</sup>

The aim of this study need to identify and analyse currently available knowledge on information needs of people with diabetes mellitus, also considering possible differences between subgroups and associated factors.<sup>8</sup>

On the report of a study issued in Die pharmaceuticals sciences-the anti-hypoglycaemic settings of the leaf's was shown to be effective in regulating blood glucoses level in diabetic rates. the study conducted by India-based Ayurveda research suggests a paste of about 8to10fresh.fully grown curry leaves taken on an empty stomach in the morning may control non-insulin dependent diabetes mellitus. It also cures diabetes due to obesity as the levels have the weight reducing properties. Curry leaf's are sufficiently more in fibres. Fibre slow down the digestion not metabolise quickly, which helps carry your blood glucose to analyse. curry leaves also accepted to naturally promote your insulin action. When your body is able to react to insulin, your blood glucosesalso under control.<sup>9</sup>

And during our community postings in urban area it was found that 1-2 cases of diabetes in each family, so we thought that this study useful to the diabetic clients in maintaining their blood glucoses level by using natural herbs or other home remedies rather than oral hypoglycaemic agents which has no side effects.<sup>10</sup>



## PREVALENCE OF DIABETES(WHO-2014)

Country in 2000-2020	In 2030(Anticipated)	Prevalence of Type II Diabetic Mellitus in Karnataka
Africa- 1,71,000,000-366 Million American- 33,016,000-29.1million Europe - 33,332,000-385million India - 31,705,000-171million	3,66,000,000-552Million 66,812,000-366million 47,973,000-438million 79,441,000-366million	<ul style="list-style-type: none"> <li>▪ 2000 – 5.8%</li> <li>▪ 2005 -6.2 %</li> <li>▪ 2010 – 7.1%</li> <li>▪ 2015-2020 8.7%</li> </ul>

The WHO reports convey that the estimation onto Type-II Diabetes mellitus in India is

### **In the year**

- 2000 - 32 million
- 2006 - 38.9 million
- 2010 - 40.09 million
- 2025 - 69.9 million
- 2030 - 80-87 million

## **CHAPTER-II**

### **OBJECTIVES**

This section deals by the statement of the difficulty, objectives onto the study, hypothesis, operational definitions, limitation of the analysis and conceptual framework, which provides a frame of reference. The statement of the problem and objectives of this study are as follows.

#### **STATEMENT OF THE PROBLEM**

**“A STUDY TO ASSESS THE EFFECTIVENESS OF CURRY LEAVES MIX IN MANAGEMENT OF BLOOD GLUCOSE LEVEL AMONG TYPE II DIABECTIC CLIENTS IN SELECTED URBAN AREA, KOLAR”.**

#### **Objectives of the study**

1. To assess the pre-interventional blood glucose level of type II diabetic clients within experimental group and control group.
2. To find the effectiveness of curry leaves mix on management of blood glucoses level in experimental group.
3. To compare pre and post-test blood glucoses level in type II diabetic clients within experimental and control group.

#### **Hypothesis**

H1: There will be significant variation within pre-test and post-test blood glucose level in the experimental group.

H2: There will be significant union within the pre-interventional blood glucose level with selected demographic variables among the type II diabetic clients.

## **ASSUMPTIONS**

### **The study consider that**

1. Consumption of curry leaves mix reduces the blood glucoses level of type II Diabetic Mellitus clients.

### **Operational definitions**

“Effectiveness: In this study the result of blood glucose level obtained in 1<sup>st</sup> & 2<sup>nd</sup> observation after the administration of 10gms of curry leaves mix for 20 days.

### **Diabetic clients:**

In this study it refers to an adult diagnosed among typeII diabetic and who are with oral hypoglycaemic agents.

### **Curry leaves mix**

The curry leaves mixture prepare by the investigator with “Murrayakoenigii” plant (curry leaves) and (neem leaves) “Azadirachta indica” with the ratio of (1:1).

### **Steps:**

- Collect the fresh well crowned curry leaves & neem leaves with proportion of (1:1)
- Washed the leaves with clean water
- Dried under the shadow
- Grind the leaves like a soft powder & mix well Packing 10gm of powder in each packets and preserved.

## **DELIMITATIONS OF THE STUDY**

- The study was focus among type II Diabetic clients in selected urban area, kolar”.

## **PROJECTED OUTCOME**

- This study will help to understand that there will be decrease in the level of blood glucoses among the type II diabetic clients after administration of curry leave powder.

## **SUMMARY**

This section have outlined on the statement of the problem, objectives, operational definitions, hypothesis, assumptions, conceptual framework and the projected outcome of the study.

## **CONCEPTUAL FRAMEWORK**

The analysis is build on the conception of administration onto 10gms curry leaves mix to Type II Diabetic clients, will reduce blood glucose level. The investigator accepted the Widen Bach support skill of clinical nursing Theory (1964) as a like for improving the conceptual framework. Ernestin Widen Bach proposes support the skill of clinical nursing theory in 1964 for nursing which illustrate a craved position also way for promote it. It guide activity towards the explicit idea.<sup>10</sup>

The theory have 3 components:

- ❖ Central purpose
- ❖ Prescript
- ❖ Actualities

### **1. Central purpose:**

It relates to what the nurse wants to achieve. It is the entire idea towards which is a nurse strives.

## **2. Prescript:**

It relates to the program of care for patients. It will specify the natures of action so that will complete the nurses central purpose.

## **3. Actualities:**

It relates to the physical, physiological, emotional and spiritual factors so that come in to play in condition including nursing action. The five realities recognition by widen Bach's be envoy, recipients, idea, means and framework.

The conceptual frame work onto the nursing practice according to this theory consists of 3 steps as follows.

Step-1: Identification the demand for help.

Step-2: Ministered the demand help.

Step-3: Verifying the demand for help was met.

### **Step I: Identification the demand for help:**

This step requires decide the necessary for help. The Type-II Diabetic clients were recognized based on demographic variables (Age, Sex, Education, Occupation, Family Income, Family history, duration of illness, medication used and exercise) inclusive and exclusive guideline, simple random sampling method was used to assign the adults in experimental and control group.

### **Step II: Ministered the demand help:**

10 gms of curry leaves mix was provided to experimental group daily in the morning with food for 14 days.

Agent: Investigator

Recipient: Type II Diabetic clients

Idea : To reduce blood glucoses level

Means : 10gms of curry leaves powder

Framework: Selected rural areas of kolar

**Step III: Verifying the demand for help was met.**

It is skilful by means of post evaluation of blood glucose level. It is ensued by an evaluation of the findings

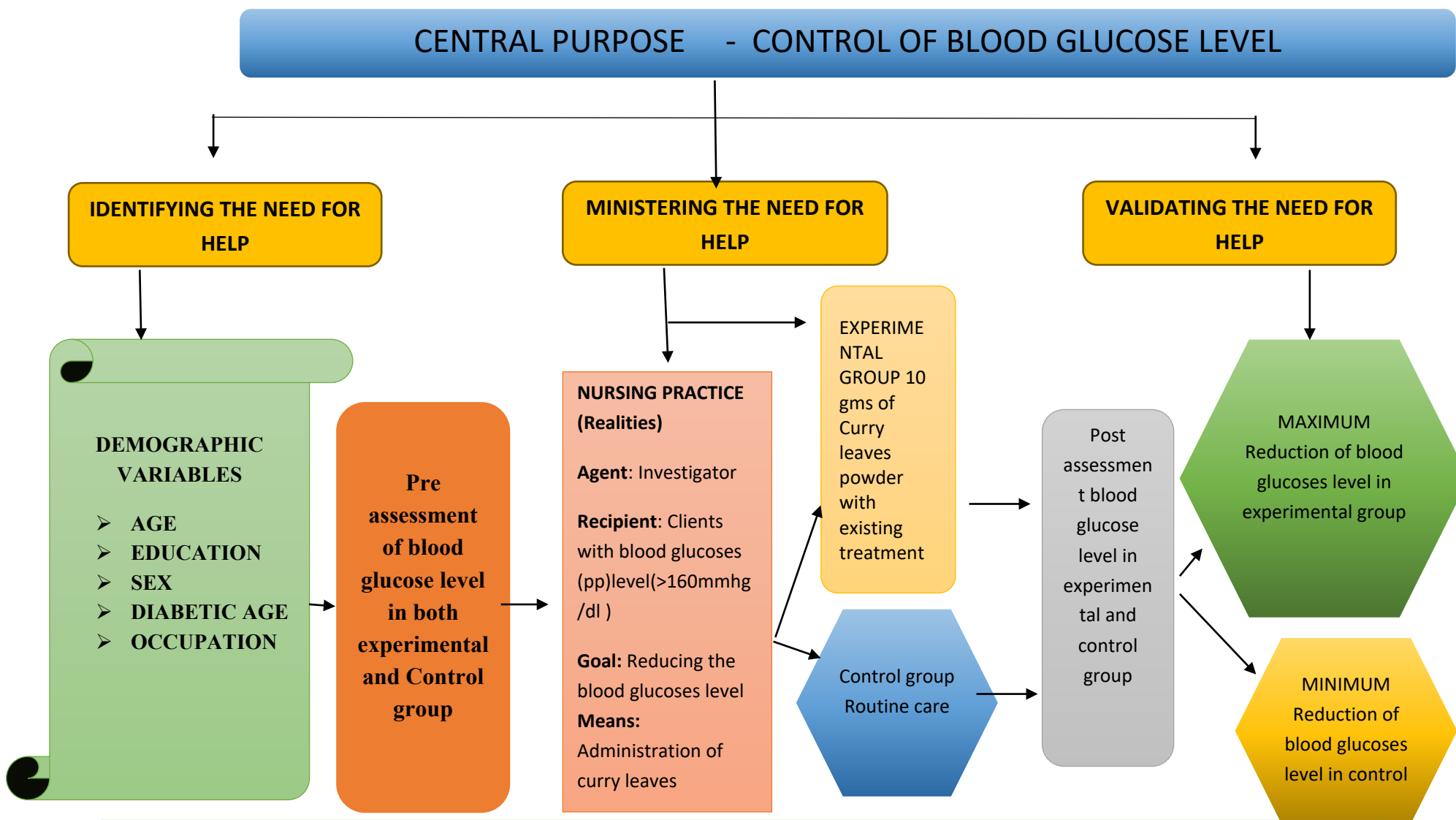


Figure 1:Widenbach's Helping Skill of Clinical Nursing Theory (1964)

## CHAPTER III

### REVIEW OF LITERATURE

Review of literature is an essential component of the research process. It is critical examination of a publication related to a topic of interest. Review should be comprehensive and evaluative. Review of literature helps to plan and direct the study in a systematic manner. For the present study literature is reviewed and organized, under three broad headings.

- **Literature related to type II diabetic mellitus.**
- **Studies related to benefits of curry leaf.**
- **Studies related to curry leaves, neem leaves**
- **Literature related to type II Diabetic Mellitus.**

A cross-sectional study by Priyanka raj (kl angadi MM2010) in Bijapur, Karnataka to assess the knowledge, attitude, and practice regarding prevention and control of diabetes mellitus among patient. Attending the diabetes clinic at B.M Patil medical college and hospital Karnataka which 730 type diabetes patient aged. /-20yrs was selected. The study findings were mean age of the clients was 56.64+/- 11.38yrs, 67% were males. 15.35% onto respondent had poor, 59.9% of the respondent had poor, 59.9% common and 24.8% had great intelligence. Majority (60-90%) of the respondent had positive attitude. 36.4% of the defendants were taking more care in case they wounded and 40.7% were exerting regularly it shows that through good member of respondents and positive knowledge and attitude regarding diabetes, the some cannot be said practice.<sup>11</sup>

A comparative study of the prevalence onto type II diabetic mellitus in various demographic regions of Andhra Pradesh, India. A random sampling technique was track to the regularity of diabetes in almost 3000 particulars of age group within 15-68 years. Elective 1000 particulars from any place. Result the study indicates that 35.5% individuals were recognized to be diabetic, specially 7.8% from tribal place, 12.5% from semi urban and 15.1% from urban place. The analysis indicates that people in urban area were also prone type of diabetes than that in tribal and semi urban area. New cases of diabetes were reported in tribal areas when compared to semi urban place indicating that rural persons



were not spared from diabetes. The analysis also indicates that there is an increase in the frequency of diabetes in tribal place of Andhra Pradesh state of India when compared to the fast studies.<sup>12</sup>

- **Studies related to management of blood glucoses level**

A cross sectional study to estimation of blood glucoses level by people with diabetes by Stuart Frankum, one hundred and four patient made estimates. Of these, 45(43.3%) underestimated their blood glucose, 18(17.3%) over estimated, and 41(39.4%) made guesses that fall within the range defined as accurate. of that not using insulin (n=85), 37(43.5) underestimated their blood glucose, 12(14%) over estimated and 36(42.3%) were accurate. Accuracy in the non-aspirin users was related with home testing, lower blood glucoses level, coming to the clinic in a fasting state, and reporting no symptoms when they felt that their blood glucoses level was high. Over estimation was associated with having co-occurring illnesses and experiencing no symptoms when their blood glucose was low. The majority of patient with diabetes in this study could not exactly estimate their blood glucoses level indicates that home testing may be a necessary part of diabetes self-care.<sup>13</sup>

- **Studies related to curry leaves, neem leaves**

“A true experimental study was conducted regarding effectiveness of curry leaves power on reduction of blood glucoses level among patients with diabetes mellitus at selected urban area kolar” conducted by K.N Gomathi 20016. by using simple random technique lottery method 40 patients with diabetes mellitus (20 in experimental group & 20 in control group) were selected. Results revealed that majority of the clients (45%) & (40%) had blood glucose level between 200-300mg/dl and 301-400mg/dl on pre-test in each experimental and control team respectively. Where as in post-test majority of clients (40%) had blood glucose level between 200 to 300 mg/dl in control & in experimental group (45%) had blood glucose level between 200 to 300mg/dl on post-test in. findings related to effectiveness clearly shows that in control group didn't have significant impact on tests results by having 'p' value greater than 0.05 level (0.147). but in experimental group which use curry leaves juice has changed the result significantly by having 'p' value. finally, study concluded that the study was highly effective in reducing blood glucoses level among patients with diabetics mellitus.<sup>14</sup>

“A true experimental study to assess the efficiency onto curry leaf juice on reduction of blood glucose level among patients with diabetes mellitus at selected hospital, Puducherry. by using the simple random sampling techniques 40 patients with diabetes mellitus (20 experimental & 20 control group) were selected. result revealed that majority of the client 45% blood glucose level 200-300mg/dl on pre-test in control group. In post-test experimental group result revealed that majority of the client (40%) had blood glucose level between 301-400mg/dl. findings related to effectiveness clearly shows that control group didn't have significant impact on test result by having 'p' value greater than 0.05 level. (0.147) but in experimental group with use of curry leaf juice 'p' value <0.000003 which is lesser than 0.05. thus, it depicts that the study was effective on reducing blood glucose level on experimental group.<sup>15</sup>

“A Quasi-experimental analysis to assess the effectiveness of curry leaf on reduction of blood glucose level among client with diabetic mellitus quasi experimental non-equivalent control group design was used sample size was 70. non-probability purposive sample technique was used. diabetes client age above 40 years 3gm of curry leaf was administered to the client in experimental group for 30 days. the fasting blood glucose levels was monitored on 1<sup>st</sup> 15<sup>th</sup>, 30<sup>th</sup> day. result majority 16(45.7%) of the client were from the age of 51-60 years, majority 22(62.9%) of the diabetic client were male, majority 18(51.4%) of the client education were secondary and higher secondary level. majority 27(77.1%) of the diabetes client were non-vegetarian. Corresponding 'p' values were 0.040 and 0.000 at 15 days 15 and day 30 respectively. this indicates that the fasting blood glucose levels in experimental group decreased significantly as compared to the control group. the variance was setup statistically important at <0.05 level.<sup>16</sup>

## **CHAPCTER IV**

### **METHADODOLOGY**

The chapter deal with the description of the methods and different steps used for collecting and organizing data, such as the research approach, research design, variables, setting of study, population, sample, sample size, sampling technique, critical for sample selection, developing and description of the tool, ethical consideration, content validity, pilot study, reliability, data collection procedures and plan for data analysis.

The current study was done to access the effectiveness of curry leaves in reducing the blood glucoses level among Type-II Diabetic client at the rural area of kolar.

### **MATERIAL AND METHOD**

#### **Source of data:**

The source of data for this study will be type II diabetic clients residing in urban areas, Kolar.

### **RESEARCH APPROACH AND DESIGN**

Research approach is a plan and procedure that consist of the steps of broad assumptions to detailed method of data collection, analysis and interpretation. Research approach is essentially divided into two categories: approach of data collection and. Approach of data analysis or reasoning.<sup>17</sup>

The research approach used was quantitative approach. The research design, adopted for this study was True Experimental Design.

### Diagrammatic presentation of the research design

Randomly Selected Samples	Pre-test	Intervention	Post-test
Experimental group	01	X	02
Control group	03	-	04

**01** - Pre-test of glucose level among Experimental group

**02** - Post-test of glucose level among Experimental group

**X** – Administration of curry leaf mix

**03** - Pre-test of glucose level among Control group

**04** - Post-test of glucose level among Control group

#### **VARIABLES:**

##### **Dependent variables:**

The dependent variable in this study is Blood glucoses level in type II Diabetic client.

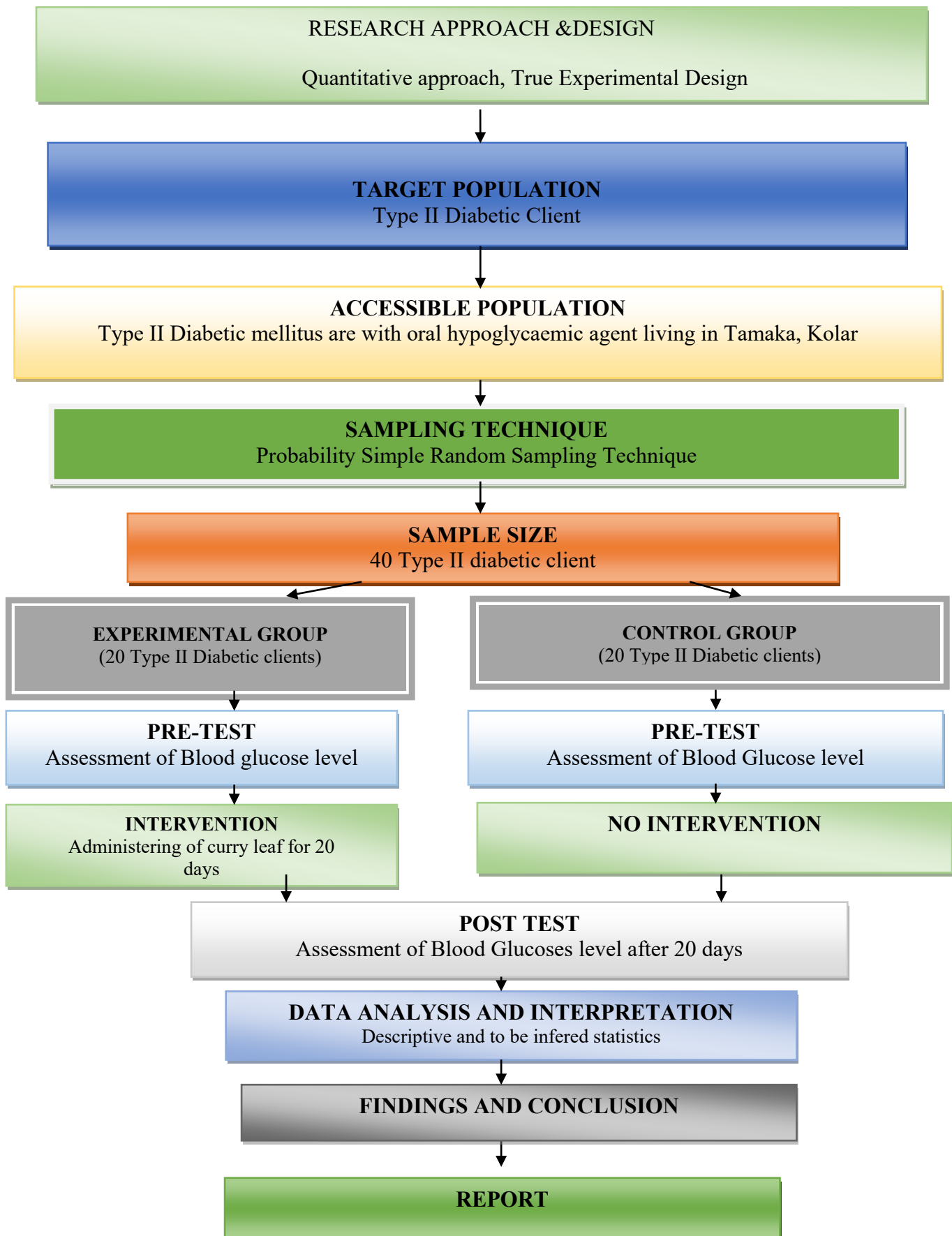
##### **Independent variables:**

The independent variables in this study iscurry leaf mix.

##### **Demographic variables:**

Age, gender, diabetic age, educational statusand occupation.

**FIG: 2 SCHEMATIC REPRESENTATION OF RESEARCH**



**Setting**

The study will be conducted in, urban area, Kolar.,

**Population**

Client with Type II diabetic mellitus are with oral hypoglycaemic agents, living in Kolar

**Sample size**

In this study the sample comprises of 40 type II diabetic clients 20 experimental group and 20 control group.

**Sampling technique**

Simple random sampling, (lottery method) was adopted for this study.

**Sampling Criteria****Inclusion criteria:**

- Client with type II diabetic mellitus and are on oralhypoglycaemic agents.
- Type II diabetic clients who are willing to participate.
- Type II diabetic clients who are available at the time of data collections.

**Exclusion criteria:**

- Type II diabetic clients whose blood glucose level less than 80mg/dl and more than 160mg/dl
- Type II diabetic clients who have diabetic complications (diabetic nephropathy, neuropathy, cardiac problems).
- Type II diabetic clients who are insulin dependent.

### **Method of data collection**

Data will be collected in the following steps.

**STEP 1:** Ethical clearance will be obtained from Research and Ethical committee in the institution (SDUCON).

**STEP 2:** Area will be surveyed for type II diabetic clients and sample will be selected by lottery method. (20-experimental and 20- control)

**STEP3:** Informed written Consent will be taken from study participants before collecting the data by explaining the process, purposes and duration of the study.

**STEP 4:** Pre-intervention Blood glucose level will be assessed by glucometer for the subjects of the experimental group and control group.

**STEP 5** Curry leaves mix will be given for experimental group for 20 days.

**STEP 6:** Evaluation of the post intervention blood glucose level will be assessed by the glucometer in 2 observation for both experimental and control group (1<sup>nd</sup> observation on 10<sup>th</sup> day 2<sup>nd</sup> observation on 20<sup>th</sup> day)

### **Data collection tool**

The tool will consist of the following sections.

#### **Section – A**

It consists of Socio Demographic Variables such as age, gender, diabetic age, educational status, occupation.

### **Statistical analysis of data**

The data analysis was done by the following steps

- Descriptive statistics will be used to analyse the demographic data(mean, standard deviation standard deviation error)

- Inferential statistics will be used to make comparison & association; pre-test will be used to find the effectiveness of curry leaves mix by comparing blood glucose level
- Chi square will be used to find the association between the Socio-demographic variables

## **DESCRIPTION ABOUT THE VALIDITY**

The content of the tool was validated by Medical Expert, community health Nursing Expert and Statistical Expert. suggestions were incorporated and the tool was finalized and used by the investigator for the main study.

## **ETHICAL CLEARANCE**

Ethical clearance was obtained from the institutional ethical committee, Sri Devaraj Urs College of Nursing, to conduct the study. Permission was attained from the principals of college of nursing, Kolar. Informed consent was taken from participants before the study.

## **METHOD OF DATA COLLECTION**

Data will be collected in the following steps.

### **STEP 1:**

The ethical clearance was attained from institutional Ethical committee.

### **STEP 2:**

Formal permission was been obtained from the concerned institutional authorities.

### **STEP 3:**

All the type II diabetic clients between the age group of 40- 70 years was screened for blood glucose level by clinical assessment blood glucoses level estimation and communication checklist.



**STEP 4:**

Diabetic clients whose blood glucose level is  $>160\text{gm/dl}$  was randomly selected by lottery method.

**STEP 5:**

40 samples (20 participants in experimental and 20 in control group) by simple random sampling techniques using lottery method based on the inclusion and exclusion criteria.

**STEP 6:**

Pretest of postprandial blood glucose level was assessed by glucometer for both experimental and control group, same instrument was used for both the group and then for the experimental group 10gm of curry leaves powder was given with food, morning/ daily in person for 20 days post assessment was conducted on the 21<sup>st</sup> day for both experimental and control group.

**PLAN OF STATISTICAL ANALYSIS OF DATA**

Data was analysed the basis of objective and hypothesis by adopted descriptive and inferential statistics.

1. Descriptive statistics was used to analyse the mean, standard deviation and standard deviation error of demographic variables.
2. Inferential statistical was adopted to determine the comparison, relationship, and association.
  - a. 't' test was adopted to detect the effectiveness of curry leaves mix by comparing pre and post blood glucose level.
  - b. Chi square was adopted to detect the association between demographic variables.

## **Summary**

This chapter of methodology has dealt on research approach, research design, setting, population, sample, sample size, sampling technique, development and description of the tool and plan for data analysis.

## **CHAPTER V**

### **RESULT**

This chapter handle with the analysis and interpretation of data collected from 40 samples of type II diabetic clients to assess the effectiveness of curry leaves on blood glucose level among type II diabetic clients residing at urban area of kolar.

Data analysis is defined as the systematic organization of the synthesis of research data and the testing of research hypothesis using data<sup>19</sup>

### **ORGANIZATION OF DATA**

The analysed data is organized and given under the following sections.

#### **SECTION A:**

Distribution of demographic variables of type II diabetic clients in experimental group and control group.

#### **SECTION B:**

Estimation of pre-test and post-test level of blood glucose level of diabetic clients and communication checklist in both experimental group and control group.

#### **SECTION C:**

To assess the effectiveness of curry leaves mix administration of diabetic client in experimental group.

#### **SECTION D:**

determine the association between post-test level of blood glucose level in type II diabetic clients with their preferred socio demographic variables in experimental and control group

## SECTION –A

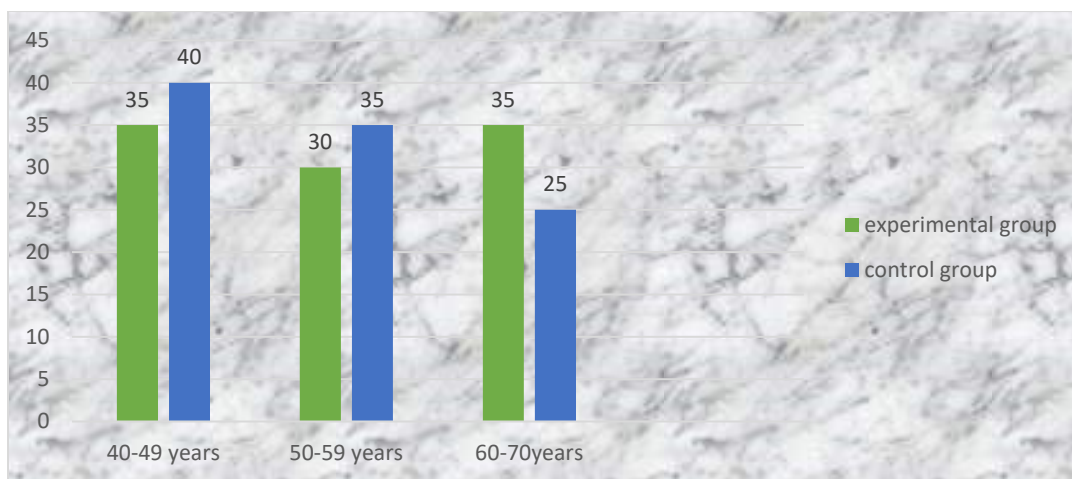
This section deals with data pertaining to socio-demographic characteristics of diabetic clients assessed for socio demographic variables before Intervention.

**TABLE -1**

**Distribution of socio- demographic variables of the participants**

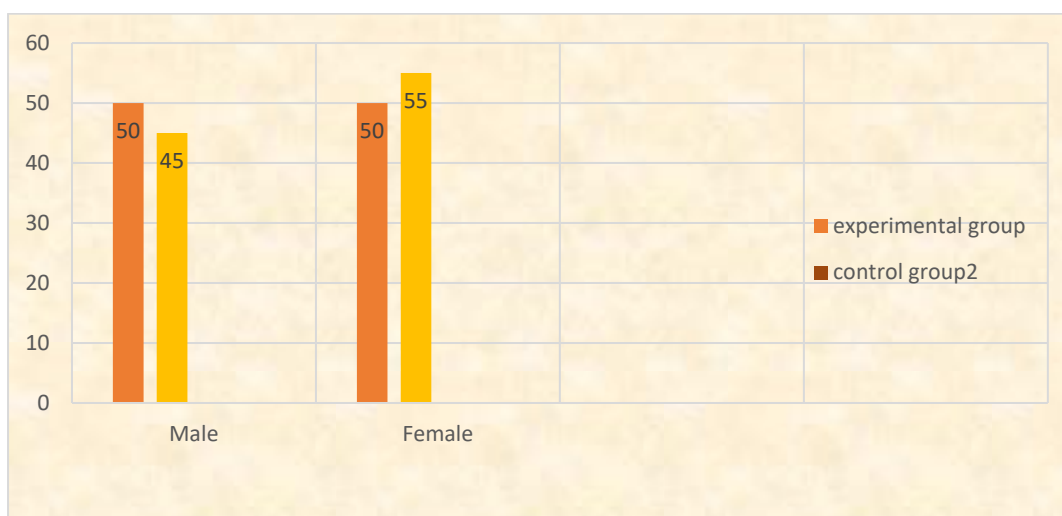
**N=40**

Sl No	Demographic variable	Experimental group		Control group	
		F	%	F	%
1	<b>Age</b> 40-49 years 50-59 years 60-70 years	07 06 07	35 30 35	08 07 05	40 35 25
2	<b>Sex</b> Male Female	10 10	50 50	09 11	45 55
3	<b>Diabetic age</b> 0-9 years 10-20 years	18 02	90 10	20 00	100 00
4	<b>Education</b> Illiterate Primary Secondary Higher secondary Graduate	05 00 12 02 01	25 00 60 10 05	01 03 10 02 04	5 15 50 10 20
5	<b>Occupation</b> Homemaker Private employee Government employee Self-employee unemployee	04 03 02 08 03	20 15 10 40 15	05 03 03 04 05	25 15 15 20 25



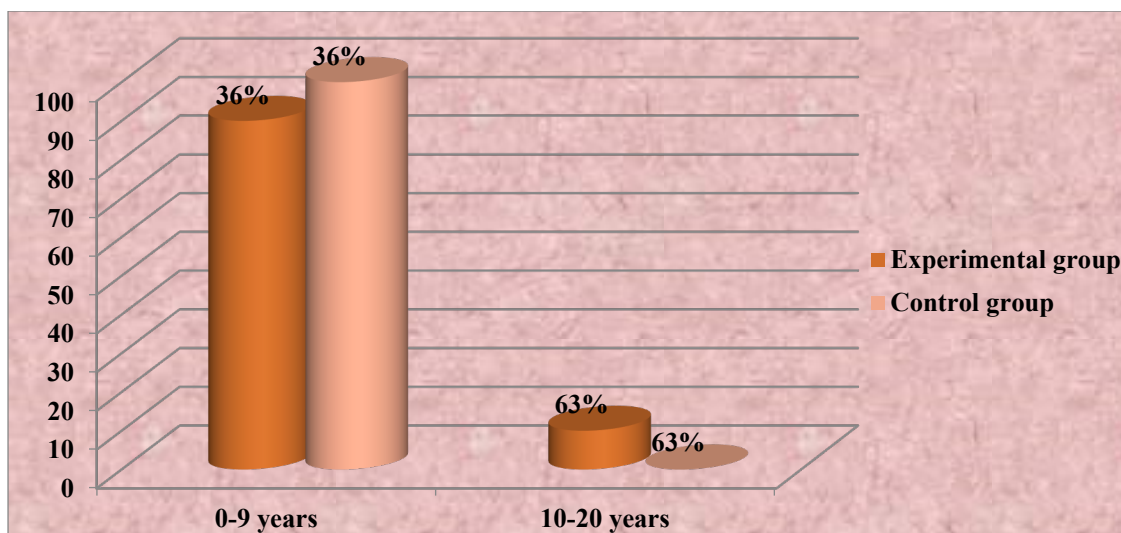
**Finger No.3:Distribution of participants according to Age in years**

The data presented in the Table No. 1 and Figure 3 shows that in Experimental group (35%) of the participants was found to be in the age group of 40-49yrs and in Control group (40%) of participants was found to be in the age group of 40-49 years



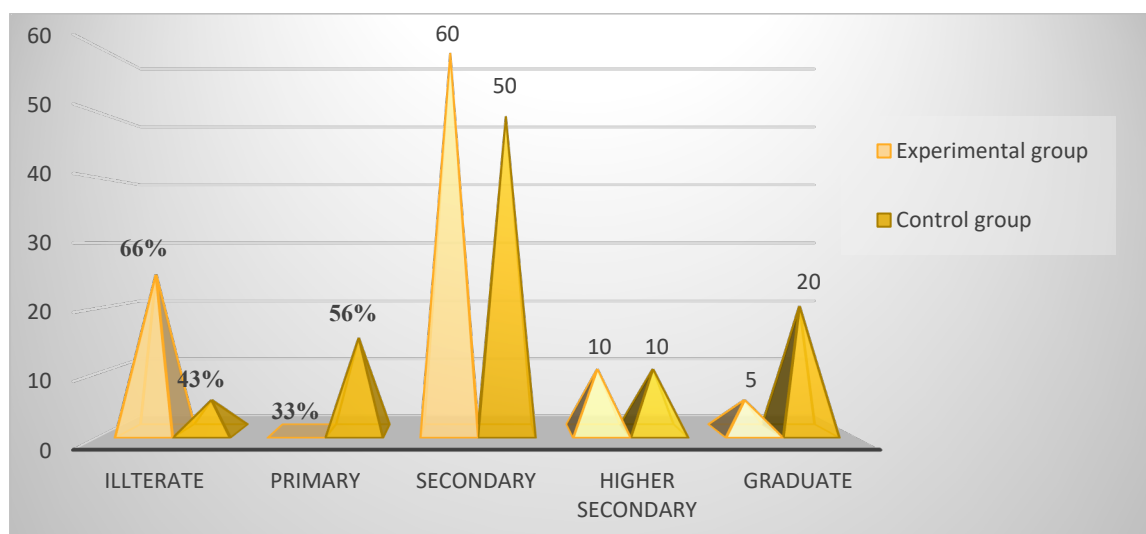
**Finger No.4:Distribution of participants under gender**

The data presented in the Table No. 1 and Figure 4 shows that in experimental group 55% women's and control group (45%) were attained type II diabetic mellitus .In control group 50% males and females having type II diabetic mellitus shown in the figure.



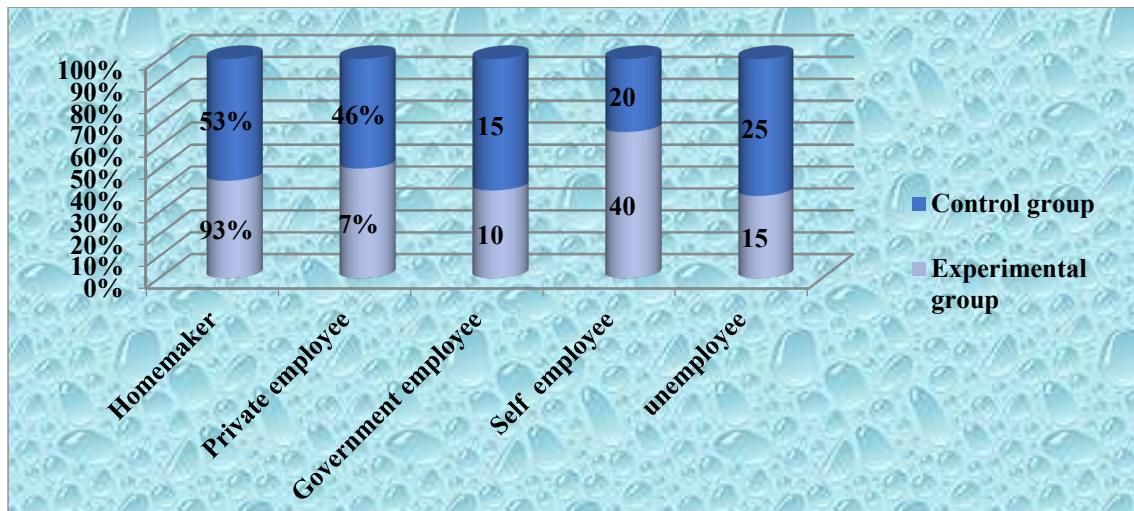
**Figure No.5: Distribution of participants according to diabetic age:**

The data presented in the Table No. 1 and Figure 5 shows that in Experimental group (63%) of the participants was found to be in the age group of 10-20yrs and in Control group (63%) of participants was found to be in the age group of 10-20yrs.



**Finger No.6; Distribution of participants according to education:**

The data presented in the Table No. 1 and Figure 6shows on the basis of educational status 60% were educated up to secondary in experimental group, 50% were educated up to primary in control group.



**Figure No.7: Distribution of participants according to occupation:**

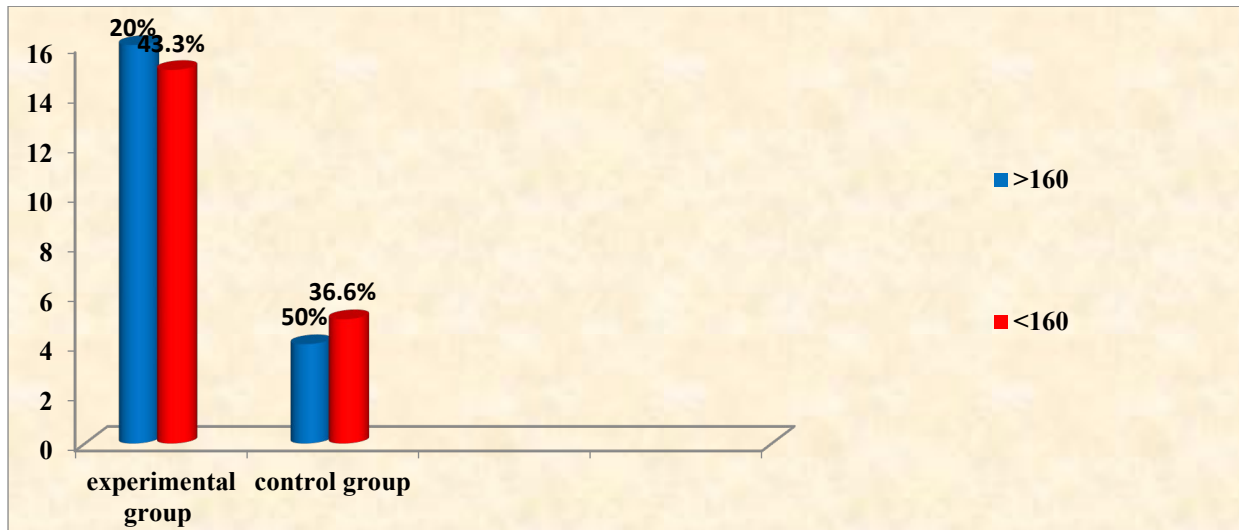
The data presented in the Table No. 1 and Figure 7 shows that in the basis of occupation majority of them were self-employee 40 % in experimental and in control group 25% of homemaker and unemployed.

## SECTION –B

**TABLE: 2**

Frequency and percentage distribution of participants according to the level of blood glucoses in Experimental group and Control group.

SL NO	Blood sugar level	Experimental group		Control group	
		f	%	f	%
1	$\leq 160$	16	80	15	75
2	$> 160$	4	20	5	25



**Fig: 8 Distribution of participants according to level of blood glucose**

Table :3 Fig 6 -shows the decrease level of blood sugar levels in both experimental and control group. Among this there is about 80 % in experimental group comes under less than blood glucoses level. About 4% of study participants blood sugar level increased in experimental group. 75% of participant's blood sugar level less than 160 in control group and 25 % participant's blood glucose level more than 160 in control group.



## SECTION –C

**Table: 3**

**Compare the pre-test and post-test scores of blood glucoses level of the type II diabetic client in experimental group & Control group.**

Group	Experimental n <sub>1</sub> =20				Control n <sub>2</sub> =20			
	Mean	SD	Paired 't value'	P value	Mean	SD	Paired' t' value	P value
<b>Pre-test</b>	146.80	31.031	2.096	0.050	141.55	30.691	0.043	0.966
<b>Post-test</b>	136.85	38.479			143.25	31.360		

Table: 3 Represents, the mean score in Experimental group was 146.80 in pre-test and 136.85 in post-test. The paired “t” value was 2.096 which is significant at  $p < 0.05$ . It shows that curry leaf mix was effective in decreasing the level of blood glucose. Hence the research hypothesis (H1) is accepted. In Control group the mean score on level of blood glucose was 141.55 in pre-test and 143.25 in post-test. The paired t” value was .043 which is not significant at  $p < 0.05$ .

**Table 4**

**Comparison of post-test level of blood glucoses level among type II diabetic client in experimental group and control group**

Group	Mean	SD	Unpaired t value	‘t’ tab value	p value	Inference
Post -test Experimental	136.85	33.479	0.254	-0.577	0.568	NS
Post-test control	143.25	31.360				
df=58, ‘t’ tab value =2.000, Statistically significant=P<0.05 level						

Table: 4- Represents, the mean score on blood glucoses level was 136.85 in Experimental group post-test and 143.25 in Control group post-test. The estimated "t" value was -0.577 which is not significant at  $p < 0.05$ . It shows that curry leaf powder was not effective in decreasing the level of blood glucose.

## SECTION - D

### Association between the post-test level of blood glucoses with their selected socio demographic variables

This section deals with the third objective of the study that was to determine the association between the level of blood glucoses with selected socio demographic variables among type II Diabetic client

**Table-5**

Association of post-test level of blood glucoses of the participants with selected socio demographic variables in experimental group

**N=20**

Demographic variables	Responses	Experimental group(n <sub>1</sub> =20)		Chi-square value and inference $\chi^2$ Value
		Median level		
		≤ 142 Median	>142 Median	
Age of diabetic client	1. 40-49yrs	05	02	$\chi^2$ =3.086 df=2 P=0.214 NS
	2. 50-59yrs	03	03	
	3. 60-70yrs	02	05	
Sex	1. Male	06	05	$\chi^2$ =1.818 df=1 P=.205 SS
	2. Female	04	05	
Diabetic age	1. 0-9 yrs	09	08	$\chi^2$ =1.180 df=1
	2. 10-20yrs	02	01	

				P=.276 SS
Education	1. Illiterate 2. Literacy	01 09	04 06	$\chi^2=0.000$ df=1 P=1.000 SS
Occupation	1) Employee 2) Unemployed	10 00	07 03	$\chi^2=2.400$ df=1 P=.121 SS

Table 5 shows the chi-square test value established at 0.05 level of significant for finding out the association of pre-test knowledge score on swine flu with selected demographic characteristics. The table denotes that calculated chi square values for age ( $\chi^2=3.086$ ), sex ( $\chi^2=1.818$ ) diabetic age( $\chi^2=1.180$ ), educational status( $\chi^2=0.000$ ) and occupation ( $\chi^2=2.400$ ). Hence the analysis revealed that there is no statistical significant association between the selected demographic variables and post test knowledge scores.

**Table-6**

**Association of post-test level of blood glucoses of the participants with selected socio demographic variables in control group**

**N=20**

Demographic variables	Responses	Control group(n <sub>2</sub> =20)		Chi-square value and inference  $\chi^2$ Value
		Median level		
		≤ 138 Median	>138 Median	
Age of diabetic client	1. 40-49yrs 2. 50-59yrs 3. 60-70yrs	06 03 01	02 04 04	$\chi^2=5.571$ df=2 P=0.062 NS
Sex	1. Male 2. Female	06 04	03 07	$\chi^2=2.566$ df=1 P=0.205 NS
Diabetic age	1. 0-9 yrs 2. 10-20yrs	09 00	11 00	$\chi^2=1.111$ df=1 P=0.292 NS
Education	1. Illiterate 2. Literacy	01 09	00 10	$\chi^2=1.558$ df=1 P=1.000 NS
Occupation	1. Employee 2. Unemployee	09 01	06 04	$\chi^2=5.625$ df=1 P=.018 NS

Table 6 shows the chi-square test value established at 0.05 level of significant for finding out the association of pre-test knowledge score on swine flu with selected demographic characteristics. The table denotes that calculated chi square values for age ( $\chi^2=5.571$ ), sex ( $\chi^2=2.566$ ) diabetic age( $\chi^2=1.111$ ), educational status( $\chi^2=1.558$ ) and occupation ( $\chi^2=5.625$ ). Hence the analysis revealed that there is no statistical significant association between the selected demographic variables and post test knowledge scores.

### **Summary**

This chapter dealt with data analysis and interpretation of the findings of the study. The data gathered was summarizes in master sheets and descriptive and inferential statistics were used for analysis. Frequency and percentage were used to analyze sample characteristics. Mean, median, percentage and 't' test were used to analyze the effectiveness of curry leaf powder to decrease blood glucose level. This shows that the curry leaf powder was an effective method to decrease the blood glucose level among type II diabetic clients.

## **CHAPTER- VI**

### **DISCUSSION**

The main aim of the study was to assess the effectiveness of curry leaf mix in decreasing the blood glucose level among type II diabetic clients. The study was conducted by using true experimental study. The present study was conducted at urban area, Kolar District. The sampling technique is simple random sampling technique was used for this study. The total sample size was 40, among them 20 were in the experimental group and 20 were in the control group, Clinical assessment of blood glucose level estimation was used for data collection. After data collection, data was organized, tabulated, summarized and analysed. The study findings were discussed in this chapter with reference to the objectives of the study

#### **OBJECTIVES OF THE STUDY**

1. To assess the pre interventional blood glucose level of type II diabetic clients in experimental group and control group.
2. To find the effectiveness of curry leaves mix on management of blood glucose level in experimental group.
3. To compare pre and post-test blood glucose level in type II diabetic clients in experimental and control group.

#### **Hypothesis**

H1: There will be significant difference between pre-test and post-test blood glucose level in the experimental group.

H2: There will be significant association between the pre-interventional blood glucose level with selected demographic variables among the type II diabetic clients.

## **SECTION A:**

### **Socio -demographic data**

Distribution of participants according to the socio demographic variables of both experimental and control including age of clients, gender, diabetic age, education and occupation of the type II diabetic clients.

## **SECTION B:**

Estimation of pre-test and post-test level of haemoglobin of type II diabetic clients in both experimental group and control group.

## **SECTION C:**

Distribution of clients according to the level of blood glucoses level in experimental group and control group.

## **SECTION D:**

Find out the association between post-test level of blood glucose level in type II diabetic clients with their selected socio demographic variables in experimental and control group



## **MAJOR FINDING OF THE STUDY**

### **Section A: Description about the demographic variables**

#### **Age:**

The major findings of the study revealed that that in Experimental group (35%) of the participants were found to be in the age group of 40-49yrs and in Control group (40%) of participants were found to be in the age group of 40-49 years

#### **Sex:**

The major finding of the study revealed that in experimental group 55% women's and control group (45%) were attained type II diabetic mellitus. In control group 50% males and females having type II diabetic mellitus shown in the figure.

#### **Diabetic age:**

The findings of the study revealed that in Experimental group (63%) of the participants were found to be in the age group of 10-20yrs and in Control group (63%) of participants were found to be in the age group of 10-20yrs.

#### **Education:**

The findings of the study basison the educational status 60% were educated up to secondary in experimental group, 50% were educated up to primary in control group.

#### **Occupation:**

The findings of the study revealed that in the basis of occupation majority of them were self-employee 40 % in experimental and in control group 25% of homemaker and unemployee.

## **SECTION B:**

### **Estimation of pre-test and post-test level of haemoglobin of type II diabetic clients in both experimental group and control group.**

The blood glucose level in post assessment is reduced when comparing with the pre-assessment of blood sugar level among Type II Diabetic client in experimental group. The mean score of pre-assessment is 146.80 and post assessment is 136.85. this shows the hypothesis of the study was proved. the t value is 2.096 with  $df=19$  and  $p=0.050$ . is statistically significant.

The blood glucoses level in post-assessment is not reduced when comparing with the pre-assessment of blood glucoses level among Type II Diabetic client in control group. The mean score of pre-assessment is 141.55 and post assessment is 143.25. the  $p=0.43$  and it is statistically not significant.

## **SECTION C:**

### **Compare the pre-test and post test scores of blood glucoses level of the type II diabetic client in experimental group & Control group.**

Among this there is about 80% in experimental group comes under less than blood sugar level. About 20% of study participant's blood sugar level increases above 160mg in experimental group. About 75% of participants' blood glucoses level reduced less than 160 mg in control group and 25% of blood sugar more than 160 mg.

## **SECTION D:**

### **Effectiveness of curry leaves mix in reducing blood sugar level in experimental group.**

The effectiveness of curry leaves in reducing blood glucose level is high among the experimental group than the control group. The mean difference is 9.95

## **SECTION E:**

### **Comparison of post-test level of blood glucose among Type II diabetic mellitus in experimental group and control group.**

Represents, the mean score on level of blood glucose was 136.85 in Experimental group post-test and 143.25 in Control group post-test. The estimated "t" value was 2.096 which is significant at  $p < 0.05$ . It shows that curry leaves was effective in improving the level of blood glucose. Hence the research hypothesis ( $H_1$ ) is accepted.

### **Summary:**

This discussion chapter dealt with statistical analysis regarding effectiveness of curry leaf mix by comparing post-test level of blood glucose level between experimental and control group participants. This chapter also described that. There was a significant decrease in blood glucose level among participants with type II diabetic clients in experimental and control group and there was significant association between post-test level of blood glucose level with selected socio demographic variables.

## **CHAPTER-VII**

### **CONCLUSION**

This section deals with conclusion, limitation and recommendation of the study. Further it includes implications for the Nursing Practice, Nursing Education, Nursing Administration and Nursing Research.

The aim of the study was to assess the effectiveness of curry leaves mix in management of blood glucose level among type II diabetic client in selected urban area kolar. True experimental design used for the study. The data was collected from 40 type II diabetic clients (20 in experimental group and 20 in control group).

#### **IMPLICATIONS OF THE STUDY**

The implications of this study can be seen in areas of nursing practice, nursing education, nursing administration and nursing research

#### **NURSING PRACTICE**

- ❖ Nurse play an essential role in preventive, promotive and curative aspects in the health care system. Especially in community health nurse having an essential role in the provide information among all diabetic population.
- ❖ Nurse should make an awareness on type II diabetics and its complication also they should mention the effectiveness of curry leaves reducing the type II diabetic client.
- ❖ Curry leaves plays a very effective role in reducing the blood glucose level.
- ❖ It will also help the nursing personnel to conduct regular health assessment at community level
- ❖ Curry leaf being effective and have high iron content and effective in reducing blood glucose level. The community health nurse should educate about the effectiveness of curry leaf in reducing blood glucose level
- ❖ to create awareness to the community on the benefits of curry leaves.

## **NURSING EDUCATION**

- ❖ Nurse should educate the patient about non-pharmacological measures to reduce the type II diabetics.
- ❖ The nursing curriculum must give importance for early detection and prevention of blood glucose level in type II diabetic clients.
- ❖ The nursing curriculum should provide clinical experience regarding conduction of study in various settings.

## **NURSING ADMINISTRATION**

- ❖ In service education provided to all nursing staff regarding diabetes mellitus.
- ❖ The diabetes training Programme to be continued and opportunities must be provided to all the nurses for the effective training in control and prevention of diabetic mellitus.
- ❖ The nurse administer should help to conduct camps for identification of diabetic mellitus clients.
- ❖ Provide knowledge regarding signs and symptoms of diabetic mellitus in community peoples.
- ❖ Pamlets , hand-out regarding diabetic mellitus help in diabetic clinics should help the clients to improve the knowledge regarding diabetic mellitus.

## **NURSING RESEARCH**

- ❖ The nurse should content periodic review of research findings through conferences, seminar and publications in professionals,national journals and websites also.
- ❖ Researchers should focus on non-pharmacological interventions to decrease blood glucose level.
- ❖ Extensive research can be done to identify the risk factors and methods of primary prevention.

## **LIMITATION OF THE STUDY**

- ❖ The study have both experimental and control group.
- ❖ The study also limited to type II diabetic clients.
- ❖ Duration of intervention was short

## **RECOMMENDATIONS**

Based on the detection of the study the recommendations are made:

- ❖ A similar study can be undertaken with a large sample in different setting.
- ❖ A comparative study can be conducted between urban and rural areas.
- ❖ A similar study can be conducted among blood glucose level in different population like nurses, teachers and factory workers.

## **CONCLUSION**

Curry leaves is packed with carbohydrates,fibre,calcium, phosphorous, iron and vitamins like Vitamin C, Vitamin A, VitaminE,.thefibre should help the reduction of diabetics. Also the curry leaves is the low cost effective product and its easily available in the home environment. Curry leaves should help to reduce the type II diabetic clients in the community.

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## ANNEXURE-I

### ETHICAL COMMITTEE CLERANCE CERTIFICATE

	SRI DEVARAJ URS COLLEGE OF NURSING	Format No.	IEC 01
	TAMAKA, KOLAR – 563 103.	Issue No.	02
	INSTITUTIONAL ETHICS COMMITTEE	Rev No.	01
		Date	01-09-2018

Ref.:No.SDUCON/IEC/49 /2019-20

MEETING NO-05

Date:14-03-2020

This is to certify that the institution committee of Sri Devaraj Urs College of Nursing, tamaka, Kolar has examined and unanimously *approved the following research projects:*

Sl. No	Name of the Topic	Guide	Investigator	Accepted/ Not accepted	Remarks
1	A study to assess the level of effectiveness of planned teaching programme on knowledge regarding health appraisal activities among primary schools of kolar taluk	Dr. Malathi K.V	Abdul Rahaman Abiya stanly Anie Varghese Ann Rose Nixon Anjali M.	<i>Accepted</i>	
2	A study to assess the effectiveness of deep breathing exercises as play way method on respiratory parameters among children admitted with lower respiratory tract infection in a selected hospital, kolar	Dr. Radha M..S.	Elizabeth joseph Alphonsa George Alphonsa john Archana Bahavana B.	<i>Accepted</i>	
3	A descriptive study to assess <i>Perceived</i> . stress among geriatrics in a selected old age homes of kolar district with a view to develop an information leaflet.	Mrs. Jairakini Aruna	Rahul Beena Arya Anna Reiji Arathi	<i>Accepted</i>	

4	A study to assess the effectiveness of clinical instructors mentoring on stress and clinical performance of 1 <sup>st</sup> year nursing students at SDUCON, Tamaka, kolar	Mrs. Subhashini Lavanya	Bini Jose Brinda Jenefer suguna Jerin Vijay Lisha Reji Mohammed Nayaz	Accepted	
5	A study to assess maternal satisfaction regarding quality of nursing care during labour and post partum among postnatal mother at selected hospital kolar.	Mrs. Punitha M	Chaitra Deepika Chickareddemma Janifer Riya jose Samuel	Accepted	
6	A study to assess the knowledge regarding benefits of iodized salt and salt preservation practices among Home makers of selected Households at kolar, with a view to conduct planned group teaching programmes	Mrs. Vani R	Priyanka Rachana Raveena Reshma Rosna	Accepted	
7	A descriptive study on identification of auditory processing disorder (APD) among school going children in selected schools at kolar.	Mr. R. Rajesh	Srikanth P S Sruthi Sncha Prasad Bhavanashree Sree kutty Sherly	Accepted	
8	A study to assess the effectiveness of a competency skill among staff nurses on code blue and CPR in selected hospital kolar with a view to develop information booklet.	Dr.Zeanath C.J	Rajesh Samyuktha Shwetha Sumi Issac Sunitha	Accepted	
9	A study to evaluate the effectiveness of video assisted Teaching on knowledge and practice regarding Sheehans syndrome among staff nurses working at selected hospital kolar.	Mrs. Gayathri	Tessi Mole Supriya Sophiya Trinipaul vinthya	Accepted	
10	A study to assess the effectiveness of curry leaves mix in management of blood glucose level among type-2 diabetic clients in a selected urban area, kolar..	Prof. Mary Minerva	Masiulla Bindushree Aswathy Sona Nathiya	Accepted	

11	A study to assess the prevalence of breast cancer and effectiveness of Planned health education (PHE) on knowledge regarding identification of warning signs of breast cancer and its prevention among women attending different OPDs of selected hospital with a view to develop video programme.	Dr. G. Vijayalakshmi	Chaitra Magrisha Prema Suresh Uma Vidhya Nethravathi Munirathna	<i>accepted</i>	
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Sl. No.	Name	Signature
1	Dr.V.Lakshmaiah	<i>Present</i>
2	Dr.Mohan Kumar	<i>Absent</i>
3	Dr.Bhuvana K.	<i>present</i>
4	Mr.Sridhar	<i>Absent</i>
5	Mr.Suresh B	<i>present</i>
6	Swamy Acharyananda Avadutha	<i>present</i>
7	Mrs.Lakshmi	<i>Absent</i>

*T. Lakshmi*  
**Member Secretary**  
**MEMBER SECRETARY**  
**ETHICS COMMITTEE**  
 SRI DEVARAJ URS COLLEGE OF NURSING  
 TAMAKA KOLAR - 563103.

*Chaitra*  
**Chairperson**  
**IEC (Human studies)**  
**ETHICS COMMITTEE**  
 SRI DEVARAJ URS COLLEGE OF NURSING  
 TAMAKA KOLAR - 563103.

## ANNEXURE-II

### LETTER SEEKING PERMISSION TO CONDUCT THE STUDY

From,

4<sup>th</sup> year BSc(N)

Community research students

SDUCON

Tamaka, Kolar

To,

The principal

SDUCON

Tamaka, kolar

SUB: Requesting to grant permission for data collection (through research guide)

Respected Madam,

This is for your kind information that we the 3<sup>rd</sup> year BSc nursing community research students, we would like to go for data collection in urban area, Kolar to conduct research project on “A study to assess the effectiveness of curry leaves in the management of blood glucose level among the type II diabetic client in selected urban area kolar”

So please kindly permit us to conduct the research project and do the needful.

Thanking you madam

Yours faithfully

Name of Guide 3<sup>rd</sup> year BSc(N)

Ms.Aswathy M.H

Prof Mary Minerva Ms.Bindhushree

HOD, CHN Dept. Mr. Muhammed Massiulla

SDUCON Ms.Nathiya M

Ms.Sona Cyriac

### **ANNEXURE-III**

#### **LETTER REQUESTING OPINION & SUGGESTION OF EXPERTS FOR ESTABLISHING CONTENT VALIDITY OF RESEARCH TOOL**

**From,**

Research students

3<sup>rd</sup> year BSc (N)

Sri DevarajUrs College of Nursing

Tamaka, kolar, 563103

To,

**Forwarded through,**

**(THE PRINCIPAL, SRI DEVARAJ URS COLLEGE OF NURSING, TAMAKA, KOLAR)**

**Respected Sir /Madam,**

SUB: Requesting for opinion and suggestion of experts for establishing content validity of research tool

We the students of basic BSc Nursing 3<sup>rd</sup> year team belonging to Dept. of Community Health Nursing have selected below mentioned topics for research project for the fulfilment of the requirements of nursing research subject for BSc(N) degree

#### **TITLE OF TOPIC**

“A Study to assess the effectiveness of curry leaves in the management of blood glucose level among the type II diabetic client in selected urban area kolar”

With the regard to the above, we kindly request your Good -self to validate the tool for its relevancy and adequacy. Hereby, we have enclosing the objectives of the study and the structured knowledge questionnaire answer key and content validity certificate for your kind reference. We will be highly obliged and thankful for your great help.

THANKING YOU

**ANNEXURE –IV**  
**CONSENT LETTER**

**From,**

4<sup>th</sup> year Bsc (N). Students

Sri Devaraj Urs College of Nursing,

Tamaka, kolar.

**Dear participants,**

I am a Bsc nursing student of Sri DevarajUrs College of Nursing, Tamaka, Kolar, conducting “**A study to assess the effectiveness of curry leaves mix in management of blood glucose level among type II Diabetic clients in selected urban area, kolar.**” You will be asked about your demographic information and Screening your blood glucoses level. I would like you to be as a participant in my study. The study will not cause any harm to you. The information’s given by you will be kept confidential and only used for the study purpose. Hope you will co-operate with me for the fulfilment of the research project.

Thank you in advance for your cooperation. Kindly sign the consent from given below.

Thanking You.

**Yours sincerely,**

4<sup>th</sup> year BSc Nursing Student,

Date:

Place:



## INFORMED CONSENT FORM

CONSENT FORM		
SI NO	NAME	SIGNATURE
1	Mr. Abdul Rasheed	Abdul Rasheed
2	Mr. Satish kumar	Satish kumar
3	Mr. Sadigulla	
4	Mr. Rameega bi	Rameega bi
5	Mr. Narayanappa	Narayanappa
6	Mrs. Radhamma	
7	Mrs. Sanitha	Sanitha
8	Mrs. Yashodhamma	Yashodhamma
9	Mrs. Genijamma	Genijamma
10	Mr. Sadir	
11	Mr. Ramarish	Ramarish
12	Mrs. Jayamma	Jayamma
13	Mr. Rukmani	Rukmani
14	Mrs. Kolavathi	Kolavathi
15	Mr. Lingappa	Lingappa
16	Mrs. Kamallamma	
17	Mr. Srinivasa	Srinivasa
18	Mrs. Lakshamma	Lakshamma
19	Mr. Thangaraja	
20	Mr. Srinivai	Srinivai

21	Mrs. Venkatamma	ಎಂ.ವೆಂಕಟಮ್ಮ
22	Mr. Jayamma	ಕೆ.ಜಯಮ್ಮ
23	Mr. Muniyappa	ಎಂ.ಮುನಿಯಪ್ಪ
24	Mr. Basib	.
25	Mrs. Muniyamma	ಎಂ.ಮುನಿಯಮ್ಮ
26	Mr. Venabhadrappa	ಎಂ.ವೆಂಕಟಾಚಾರ್
27	Mrs. Sujathamma	ಎಂ.ಸುಜಾತಮ್ಮ
28	Mr. Yosodhamma	.
29	Mr. Rajappa	ಎಂ.ರಾಜಪ್ಪ
30	Mrs. Ravamma	.
31	Mr. Ravi	ಎಂ.ರವಿ
32	Mrs. Kathamma	.
33	Mrs. Gowamma	ಎಂ.ಗೌರಮ್ಮ
34	Mr. Kumar	ಕುಮಾರ್
35	Mr. Pavithra	ಪಾವಿತ್ರಾ
36	Mr. Venkatesh	ಎಂ.ವೆಂಕಟೇಶ್
37	Mrs. Kalavathi.	ಕಲಾವತಿ
38	Mr. Ramappa	ಎಂ.ರಾಮಪ್ಪ
39	Mrs. Chinamma	.
40	Mr. Kumar Sai	ಕುಮಾರ್ ಸೈ



# CONSENT FORM

SI NO	NAME	SIGNATURE
1	Mr. Abdul Rasheed	Abdul Rasheed
2	Mr. Satish kumar	Satish kumar
3	Mr. Sadigulla	
4	Mr. Rameega bi	Rameega bi
5	Mr. Narayanappa	Narayanappa
6	Mrs. Radhamma	
7	Mrs. Sanitha	Sanitha
8	Mrs. Yashodhamma	Yashodhamma
9	Mrs. Genjamma	Genjamma
10	Mr. Sadir	
11	Mr. Ramarish	Ramarish
12	Mrs. Jayamma	Jayamma
13	Mr. Rukmani	Rukmani
14	Mrs. Kolavathi	Kolavathi
15	Mr. Rangappa	Rangappa
16	Mrs. Kamallamma	
17	Mr. Srinivasa	Srinivasa
18	Mrs. Lakshamma	
19	Mr. Thangaraja	Thangaraja
20	Mr. Sriniva	Sriniva

21	Mrs. Venkatamma	ಬೆಂಕತಮ್ಮ
22	Mrs. Jayamma	ಜಯಮ್ಮ
23	Mr. Muniyappa	ಮುನಿಯಪ್ಪ
24	Mr. Basib	.
25	Mrs. Muniyamma	ಮುನಿಯಮ್ಮ
26	Mrs. Verabhadrappe	ವೆರಬದ್ರ. A.S
27	Mrs. Sujathamma	ಸುಜಾತಮ್ಮ
28	Mrs. Yosodhamma	.
29	Mr. Rajappa	ರಾಜಪ್ಪ
30	Mrs. Ravanmma	.
31	Mr. Ravi	ರವಿ
32	Mrs. Kathamma	.
33	Mrs. Gowamma	ಗೌರಮ್ಮ
34	Mr. Kumar	ಕುಮಾರ
35	Mrs. Pavithra	ಪಾವಿತ್ರಾ
36	Mr. Venkatesh	ಬೆಂಕತೇಶ್
37	Mrs. Kalavathi. E	ಕಲಾವತಿ
38	Mr. Ramappa	ರಾಮಪ್ಪ
39	Mrs. chinamma	.
40	Mr. kumar Sai	ಕುಮಾರ್ ಸೈ

#### ANNEXURE-V

## **CONTENT VALIDITY CERTIFICATE OF TOOL**

I hereby certify that I have validated the tool of 3<sup>rd</sup> year B.Sc. Nursing students of Sri Devaraj Urs College of Nursing, Tamaka, Kolar, who is undertaking research project as partial fulfilment of Basic B.Sc. Nursing Degree on:

“A study to assess the effectiveness of curry leaves in the management of blood glucose level among the type II diabetic client in selected urban area kolar”

Place:

Signature of the expert

Date:

Name:

Designation:

**ANNEXURE-VI**

**LIST OF EXPERT**

1.Dr. Zeanath C J

HOD of MSN and CNO of RLJH

SDUCON

Tamaka, Kolar

2. Prof. Mary Minerva

HOD of CHN Department

SDUCON

Tamaka.

3.Prof. JayrakiniAruna

HOD of MHN Department

SDUCON

Tamaka, Kolar

4.Mr. Rajesh R

Associate Professor

HOD of FON Department

SDUCON

Tamaka, Kolar

5.Mrs.Punitha

Associate Professor

OBG Department

SDUCON

Tamaka, Kolar

6.Mrs.LavanyaSubhashini

Associate Professor

CHN Department

SDUCON

Tamaka, Kolar

**ANNEXURE-VII**  
**PHOTOGRAPHS OF DATA COLLECTION**









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### Certificate of Plagiarism Check for Dissertation

Author Name	Ms. Aswathy.MH, Ms. Bindhushree, Ms. Nathiya. M,
Course of Study	B .Sc Nursing
Name of Guide	Prof. Mary Minerva
Department	Community Health Nursing
Acceptable Maximum Limit	10%
Submitted By	sduconlib@gmail.com
Paper Title	A Study to Assess the effectiveness of curry leaves mix in management of blood glucose level among the type II Diabetic clients in selected urban area, kolar
Similarity	8%
Paper ID	456010
Submission Date	2022-02-03 09:33:11

Signature of Student

*[Signature]*  
S. S. S. S.

SDUCON Librarian

*Aruna S.V.*  
Librarian

Sri Devaraj Urs College of Nursing  
Tamaka, Kolar-563103

Signature of Guide

*[Signature]*  
03/02/22

*[Signature]*  
03/02/22  
Head of the Department  
Dept. of Community Health Nursing  
Sri Devaraj Urs College of Nursing  
Tamaka, Kolar - 563 101.

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