IOSR Journal of Nursing and Health Science (IOSR-JNHS)
e-ISSN: 2320–1959.p- ISSN: 2320–1940 Volume 7, Issue 1 Ver. IV. (Jan.- Feb .2018), PP 31-45
www.iosrjournals.org

Statement of the Problem ‘A Study To Assess The Knowledge Regarding Glaucoma And Its Management Among Patients With Glaucoma In Selected Hospitals At Tumkur With A View To Develop An Information Booklet

Sheela Kumari[1], Virupaxappa Savadi[2], Sudha Raddi[3]
[1]*kle institute of nursing sciences Belgaum*
[2]*kle institute of nursing sciences Belgaum*
[3]*principal kle institute of nursing sciences Belgaum*

Abstract
Back ground of the study: *Glaucoma is a condition characterized by increased tension or pressure in the eye causing progressive structural or functional damage. It is a chronic disease that requires life-long treatment and could ultimately lead to blindness. Awareness of glaucoma and its treatment can play an important role in encouraging people to seek timely eye care and can therefore help in reducing the burden of visual impairment. A substantial improvement in awareness levels would, hopefully, improve diagnosis rates. Increasing awareness about glaucoma is important as the disease occur over a long period of time and is often recognized when the disease is quite advanced. Awareness on glaucoma helps to get better disease detection and patient compliance. In the present study data was collected on knowledge regarding Glaucoma and its management among patients with glaucoma in selected hospitals at Tumkur.*

Objectives of the study

1. *To assess the knowledge regarding glaucoma and its management among patients in selected Hospitals at Tumkur.*
2. *To find an association between the level of knowledge with selected sociodemographic variables.*
3. *To develop an Information Booklet regarding glaucoma and its management.*

Hypothesis
H_1: *There will be a significant association between the level of knowledge with selected socio-demographic variables.*
Methodology: *In the methodology the investigator selected descriptive research approach. The study was conducted in the selected Eye Hospitals at Tumkur. The populations were patients with glaucoma. The investigator adopted non probability convenient sampling as a sampling technique. Sample size is 100 Patients. The data collection was carried out from 01-03-2014 to 31-03-2014. Formal written permission was obtained from the authorities to conduct the study. Self administered knowledge questionnaire used for the data collection. Based on the statement of the study and the objectives, to assess the knowledge regarding Glaucoma and its management among patients with glaucoma, a descriptive research design was adopted for the present study. Data was analyzed by using descriptive and inferential statistics.*
Major findings and results: *he results of the study shown that 56(56%) patients had inadequate knowledge, followed by 42(42%) had moderately adequate knowledge and equal number of patients i.e. 2(2%) had adequate knowledge. There was a significant association between the level of knowledge and variables like Gender (χ^2 =7.05), and educational status (χ^2 =15.89). There was no significant association between the level of knowledge and all the variables like age (χ^2 =4.30),, place of residence (χ^2 =0.60) , occupation(χ^2 =4.51), monthly income of the family (χ^2 =6.65), source of information(χ^2 =2.55) and family history of Glaucoma(χ^2 =0.034) and Attended any training programme((χ^2 =0.31) at $p<0.05$ level of significance. H_2 was accepted.*
Interpretation and conclusion:*The findings of this study support the need for conducting an awareness programme on Glaucoma and its management to the patients. The study proved that majority of the patients had inadequate knowledge.*
Key words: *Knowledge, patients, Glaucoma and its management and Information booklet*

Date of Submission: 05-01-2018 Date of acceptance: 29-01-2018

I. Introduction

Eye problems and resultant visual interfere with patient's ability to function independently, to perceive meaning in the world, to enjoy aesthetic pleasure, and to communicate. Although fewer people today lose their sight from infections, the incidence of blindness is rising.[1] The ability to see the world clearly can easily be taken for granted .The eye is a sensitive, highly specialized sense organ subject to various disorders, many of which lead to impaired vision. Impaired vision affects an individual's independence in self-care, work and lifestyle choices, sense, self-esteem, safety, ability to interact with society and the environment, and overall quality of life. Many of the leading causes of visual impairment are associated with aging glaucoma and two thirds of the visually impaired population is older than 65 years of age.[2] Glaucoma is a disease of the major nerve of vision, called the optic nerve. The optic nerve receives light-generated nerve impulses from the retina and transmits these to the brain, where we recognize those electrical signals as vision.. If glaucoma is not diagnosed and treated, it can progress to loss of central vision and blindness. Glaucoma is usually, but not always, associated with elevated pressure in the eye. Generally, it is this elevated eye pressure that leads to damage of the eye (optic) nerve. In some cases, glaucoma may occur in the presence of normal eye pressure. This form of glaucoma is believed to be caused by poor regulation of blood flow to the optic nerve.[3]

Early glaucoma in adults are often vague and variable, making it hard to detect. As glaucoma disease advances, symptoms such as blurred vision or a gradual loss of peripheral vision can occur. A major risk factor for glaucoma is a family history of the disease. If a parent with glaucoma, risk of glaucoma is three to five times the average risk. If have a sibling with glaucoma, risk is seven to nine times the average risk. The incidence of glaucoma also increases with age. Other risk factors for glaucoma include previous eye injuries, exposure to steroid medications, short-sightedness, diabetes, history of migraines, and high blood pressure.[4] As of 2010, there were 44.7 million people in the world with open angle glaucoma. The same year, there were 2.8 million people in the United States with open angle glaucoma. By 2020, the prevalence is projected to increase to 58.6 million worldwide and 3.4 million the United States. WHO has estimated that 4.5 million people are blind due to glaucoma.[5] The modern goals of glaucoma management are to avoid glaucomatous damage and nerve damage, and preserve visual field and total quality of life for patients, with minimal side effects. This requires appropriate diagnostic techniques and follow-up examinations, and judicious selection of treatments for the individual patient. Although intraocular pressure is only one of the major risk factors for glaucoma, lowering it via various pharmaceuticals and/or surgical techniques is currently the main stay of glaucoma treatment.[6]

Surgical techniques may be used to increase drainage. These techniques include using lasers (laser trabeculectomy) to treat the trabecular meshwork implanting artificial drainage valves, and surgically cutting additional passageways to drain the fluid. Risks associated with these surgical procedures include infection, cataracts, bleeding, and hypotony. Even if the surgery is initially successful, scarring may close the drainage channels at the surface layers in the course of months to years.[7]The surgery will normally recommend to relieve the internal pressure. But this does not remove the cause of the excess fluid. Hence the operation does not guarantee that the trouble does not recure or will not affect the other eye. The natural treatment of the glaucoma, which is the same as that for any other condition arising from toxicity and is targeted toward preserving the remaining sight. Glaucoma cannot **cure** in the advanced stages but proper nutrition and other natural methods can control the problem and taking care of the remaining sight.[8] In Researcher opinion ,The patients should know about what glaucoma is, how it comes about, depending upon the type of glaucoma that particular patient may have. The vast majority of cases can be controlled but not cured, and that best shot at keeping vision is to prevent further damage because it can't reverse damage once it has occurred. At last it will cause blindness.[9q]

II. Methodology

Thinking well is wise; planning well is wiser, doing well is best of all"

Oscar Wilde

Research methods are the techniques / methods that the researchers used in performing research operations. Research methodology is the systematic way to solve the research problem. It deals with defining the problem, formulation of hypothesis, methods adopted for data collection and statistical techniques used for analyzing the data with logical reason behind it. This chapter presents the methodology adopted for study. It includes the research approach, research design, setting, population, sampling criteria, sampling technique, description of tool, testing of tools, pilot study, procedure for data collection and plan for data analysis.

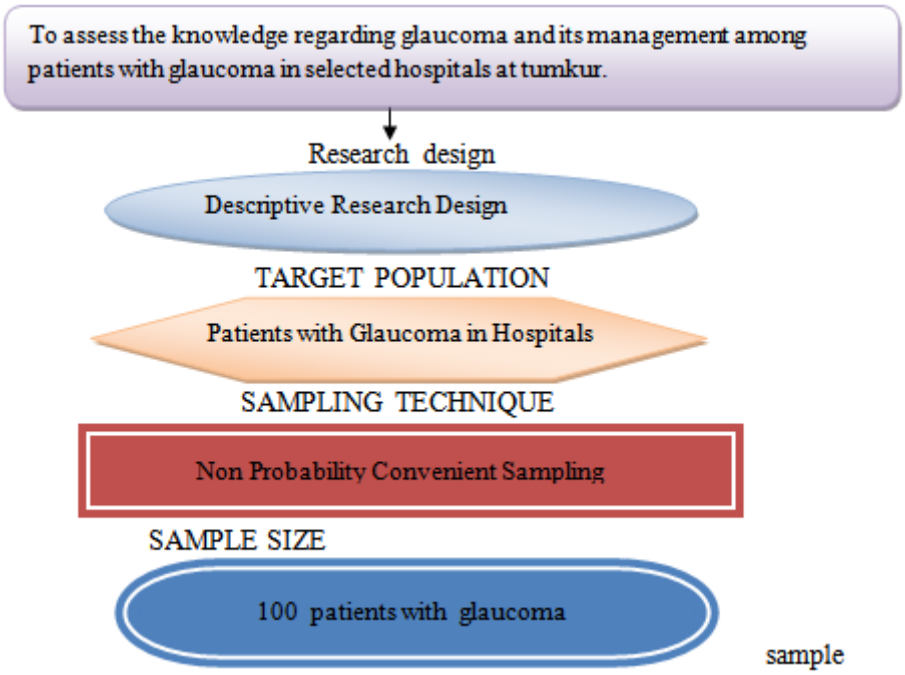
Research approach

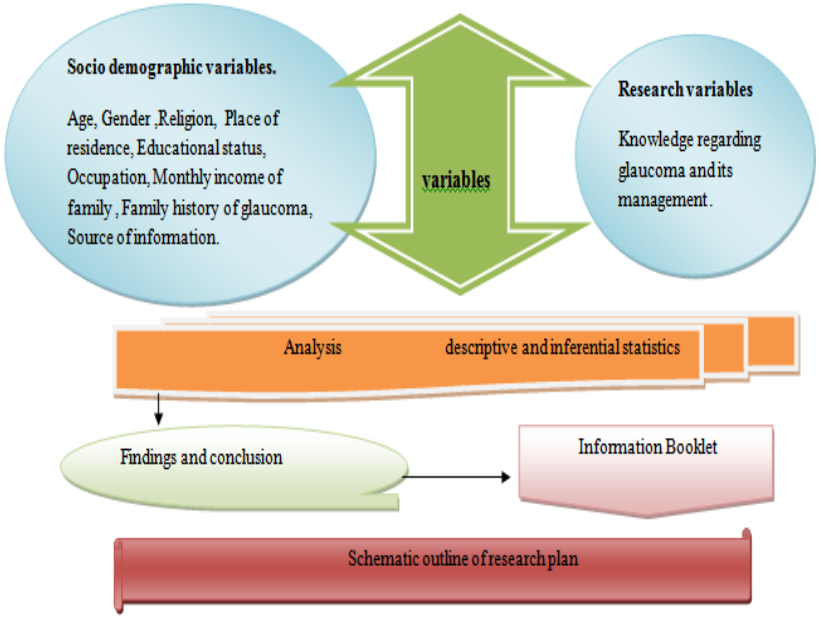
Research approach indicates the broad based procedure for collection of data in a particular situation. The choice of the appropriate approach depends on the purpose of the study. In view of the nature of the problem and to accomplish the objectives of the study a descriptive research approach was used to assess the knowledge and regarding Glaucoma and its management among patients with glaucoma.Descriptive approach describe situations as they exist in the world and accurate account of characteristics of particular individuals,

situations or groups and the descriptive studies help one to observe, describe and document different aspects of a situation.

III. Research Design

Research design of a study spells out the basic strategies that the researchers adopt to develop information that is accurate and interpretable. It is the overall plan on obtaining answers to the questions being tudied and handling some of the difficulties encountered during the research process. Based on the statement of the study and the objectives, to assess the knowledge regarding Glaucoma and its management among patients in selected Hospitals at Tumkur, a Descriptive Research Design was adopted for the present study.





VariablesVariable is an attribute of a person or an object that varies, that is taken on different values. Two types of variables were identified in this study. They are research variables and socio-demographic variables.
Research variables: - Research variables are concept at various levels of abstraction that are measured, manipulated or controlled in the study. Research variables used for this study include Knowledge.
Socio-demographic variable: - The socio-demographic variables considered for this study were age, gender, religion, place of residence, educational status, occupation**,** monthly income of family, source of information, and family history regarding Glaucoma.

Settings of the study

Settings are the more specific place where data collections will occur. The study was conducted in selected Hospital at Tumkur. The setting was chosen on the basis of feasibility in terms of availability of the OPD patients.

Population of the study

Population refers to the total category of persons or objects that meet the criteria for study establish by researcher, any set of persons, objects or measurements having an observable characteristic in common. The target population for this study was Patients attending OPD of Hospitals.

Sample

A sample is a selected proportion of the defined population.
The sample selected for the present study was patients with glaucoma in selected hospitals at Tumkur.

Sample size

Sample size is the number of observations used for calculating estimates of a given population. The sample size of the present study was 100 patients with glaucoma.

Sampling technique

Sampling technique is an important step in the research process. It is the process of selecting representative units or subsets of a population. The investigator was used the non probability convenient sampling technique to select the samples for the present study.

Sampling Criteria

Sampling Criteria involves selecting cases that meet some predetermined criterion of importance. The criteria for sample selection are mainly depicted under two headings, which includes the inclusive criteria and exclusive criteria.

Inclusive criteria

1. Patients who are attending the OPD in selected Hospitals at Tumkur.
2. Patients who are admitted in selected hospitals at Tumkur.
3. Patients who are willing to participate in the study.

Exclusive criteria

1. Patients who cannot read and write kannada.
2. Patients who are not available at the time of data collection.
3. Patients who are having blurred vision.

Development and selection of the tool

The tool is the vehicle that could obtain data pertinent to the study and at the same time adds to the body of general knowledge in the discipline. Selection and development of the tool was done based on the objectives of the study. After an extensive review of literature and discussion with the experts the self administered knowledge questionnaire was found appropriate to assess the knowledge regarding Glaucoma and its management among patients with glaucoma. The developed tool was refined and validated by the subject experts and guide.
The tool consisted of three sections:

Section –A: Socio-demographic data

It consist of nine items for obtaining information about the selected socio-demographic data's such as age, gender, , place of residence, educational status, occupation**,** monthly income of the family, source of information, family history related Glaucoma and attending any training programme related to Glaucoma and its management.

Section –B: Knowledge questionnaire on Glaucoma

The self administered knowledge questionnaire on glaucoma and its management includes 30 multiple choice questions. The numbers of questions under various headings are given below:

Table 1: Aspect wise distribution of questions

Aspects/ Contents	**No of Items**
Introduction regarding Glaucoma	2
Definition of Glaucoma	3
Incidence of Glaucoma	3
Risk factors of Glaucoma	1
Causes of Glaucoma	1
Signs and symptoms of Glaucoma	3
Types of Glaucoma	1
Diagnostic evaluation of Glaucoma	1
Complication of glaucoma	1
Management of Glaucoma	4
Prevention of Glaucoma	10
Total	30

Every correct answer was accorded a score of one (1) and every incorrect/unanswered question was accorded zero (0). The maximum score on self administered knowledge questionnaire was thirty (30). The different levels of knowledge is categorized as follows:

Adequate knowledge (>75%)	23-30
Moderately adequate knowledge (50-75%)	15-22
Inadequate knowledge (<50%)	0-14

Validity of the tool

Validity refers to a complete which broadly concerns the soundness of the study's evidence that is whether the findings are congruent, convincing and well grounded.Content validity is concerned with scope of coverage of the content area to beMeasured. It is a case of expert judgment about the content area included in the research instrument to measure a particular phenomenonValidity of the tool was assessed by obtaining opinion from experts comprising of two ophthalmologist, seven Nurse Educators (Medical surgical specialty),one statistician and one Educationist. Prepared tool was evaluated in two criteria-agree, disagree and comments. Appropriate corrections were made according to expert's suggestions and corrections and tool was finalized with the help of research guide.

Pilot study

Pilot study is a small scale version or trial run of the major study. Its function is to focus the assessment of the adequacy of measurement. Pilot study was conducted for 1 month days from 05.02.2014 to 13.02.2014 in Akshara Eye Hospital,Mookambika Modi Eye Hospital, Tumkur. After getting written permission from Medical Officer, the study was conducted among 10 samples that are 10% of the main sample to measure the authenticity of the tool, the strength and weakness of the tool was identified and assured confidentiality. No significant problem was faced during Pilot study.

Reliability of the tool

Reliability is defined as the extent to which the instrument yields the same result on the repeated measures that is concerned with the consistency, accuracy, stability and of homogeneity. A test was done to establish the reliability and to determine the language clarity and feasibility of the tool. The reliability of the tool is computed by using Split half technique, where 'r' value obtained was 0.73 which showed that the tool was reliable and valid.

Data collection procedure

A prior written permission was obtained from the Medical Officer of the selected hospital at Tumkur. Study was conducted between 01-03-2014 to 31-03-2014 after self introduction, nature and objectives of study were explained to the patients to obtain maximum co-operation. Anonymity and confidentiality were assured to patients and made them comfortable. Obtained consent from the patients for the study. Self administered knowledge questionnaire was distributed during the study. An average of 5-6 patients was made to fill the tool daily and approximately 15-30 minutes were allowed for them to answer the questions and to complete it. At the end of successful data collection, conveyed thanks to the patients.

Plan for Data analysis

Data analysis is a systematic organization and synthesis of research data and testing of research hypothesis using those data. The data obtained was analyzed in terms of objectives of the study using descriptive and inferential statistics. The plan of data analysis is as follows:

1. Organization of data in master sheet/computer
2. Computation of frequencies and percentage for the analysis of socio-demographic variables.
3. Computation of mean, median and mean deviation.
4. Karl Pearson correlation coefficient was used to find out the relationship between the level of knowledge.

The data will be presented in the form of tables and graphs.

IV. Results

This chapter deals with analysis and interpretation of information collected through self administered knowledge questionnaire regarding Glaucoma and its management from 100 patients with glaucoma in selected Hospitals at Tumkur.Kerlinger (1995) defines 'Analysis' as the categorizing, ordering, manipulating and summarizing of data to obtain answers to research questions. Abdella and Levine mentioned that interpretation of tabulated data could bring light to the real meaning of the finding of a study. The purpose of analysis is to reduce the data into the intelligible and interpretation form so that the relations of the research problems can be studied and tested. The present study was designed to assess the knowledge regarding Glaucoma and its management among patients with glaucoma in selected Hospitals at Tumkur with a view to develop an Information booklet. Collected data were recorded, organized, analyzed and interpreted by using descriptive and inferential statistics.

Objectives of the study

1. To assess the knowledge regarding glaucoma and its management among patients in selected Hospitals at Tumkur.
2. To find an association between the level of knowledge with selected sociodemographic variables.
3. To develop an Information Booklet regarding glaucoma and its management.

Organization of findings

1. The data collected from the patients has been organized and presented under the following headings:
2. Section I: Frequency and percentage distribution of the patients according to their socio-demographic variables.
3. Section II**:** Assessment of knowledge regarding Glaucoma and its management among patients.
4. Section III: Association between the level of knowledge and selected socio-demographic variables.

Section I:Frequency And Percentage Distribution Of The Patients According To Their Socio-Demographic Variables

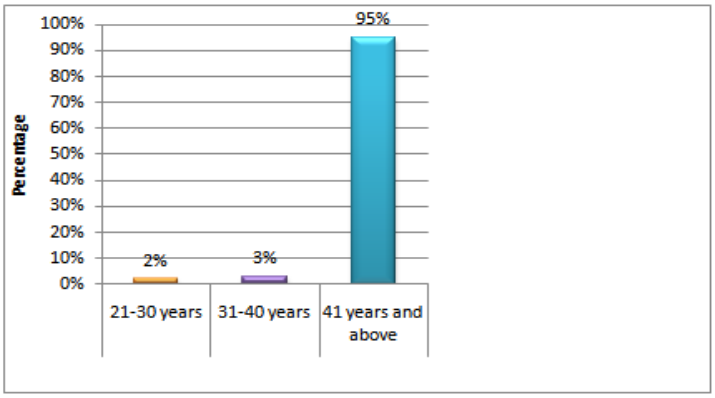
This section deals with the data pertaining to the base line performa of patients. The data is analyzed by descriptive statistics and presented in terms of frequency and percentage.

Section I:Frequency and percentage distribution of the patientsaccording to their socio-demographic variables

Table 2A : Frequency and percentage distribution of the patients according to their age**.**

Demographic variables		**Frequency**	**Percentage %**
Age	21-30 years	02	02
	31-40 years	03	03
	41 years and above	95	95

Figure 3



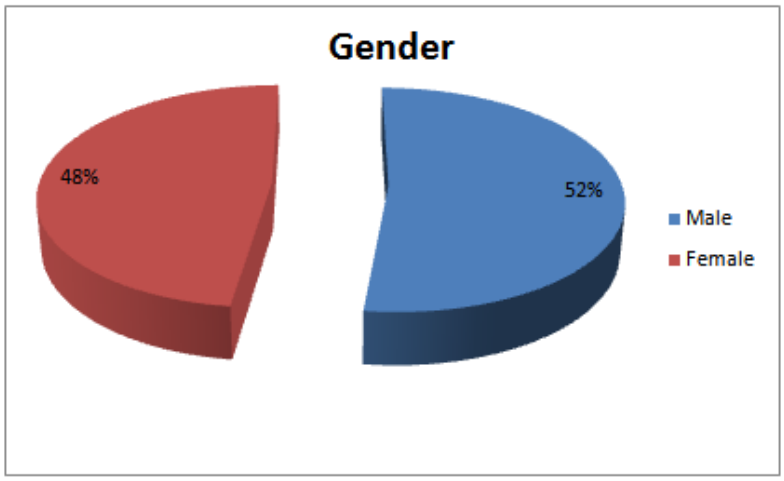
. Table 2A shows that majority of the patients 95 (95%) were in the age group of 41 years and above, followed 3 (3%) were between the age group of 31 to 40 years, followed by 2 (2%) were between the age group of 21 to 30 years .

Table- 2B : Frequency and percentage distribution of the patients according to their gender.

n=100

Demographic variables		**frequency**	**Percentage %**
Gender	Male	52	52
	Female	48	48

Figure 4



igure 4 shows that majority of the patients 52 (52%) were males and 48 (48%) were females.

Table-2C : Frequency and percentage distribution of the patients according to their place of residence.

n=100

Demographic variables		**frequency**	**Percentage %**
Place of residence	Urban	74	74
	Rural	26	26

.

Figure 5

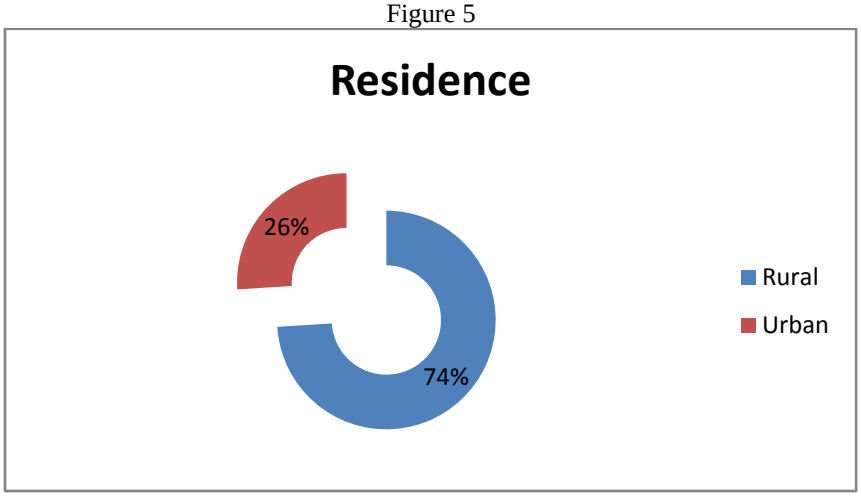


Figure 5 shows that majority of them 74(74%) were residing in urban area and remaining 26(26%) were residing in rural area.

Table-2D Frequency and percentage distribution of the patients according to their Educational status. n=100

Demographic variables		**frequency**	**Percentage %**
Educational status	Illiterates	12	12
	Primary school	43	43
	High school	24	24
	Intermediate	21	21
	Graduate	00	00

Figure 6

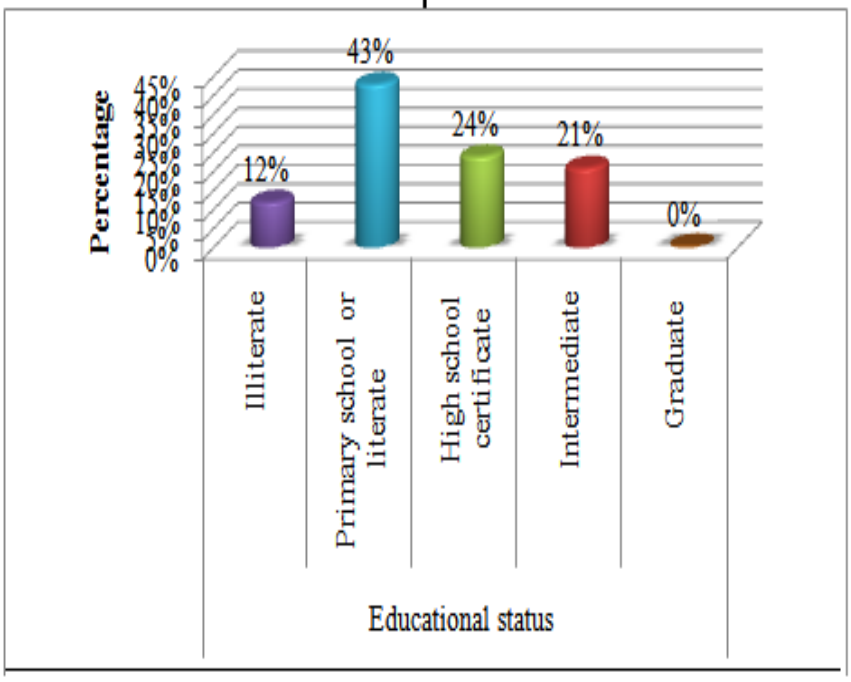


Figure 6 shows Considering their educational status, majority of them43(43%) were had primary education, 24 (24%)High school certificate, 12(12%)were illiterate, 21(21%) were had intermediate education, 12(12%)were illiterate, and 0(0%) were Graduate.

Table- 2E Frequency and percentage distribution of the patients according to their occupation

n=100

Demographic variables		frequency	Percentage %
Occupation	Government employee	17	17
	Non-government employee	58	58
	Self employed	25	25
	unemployed	0	0

Figure 7

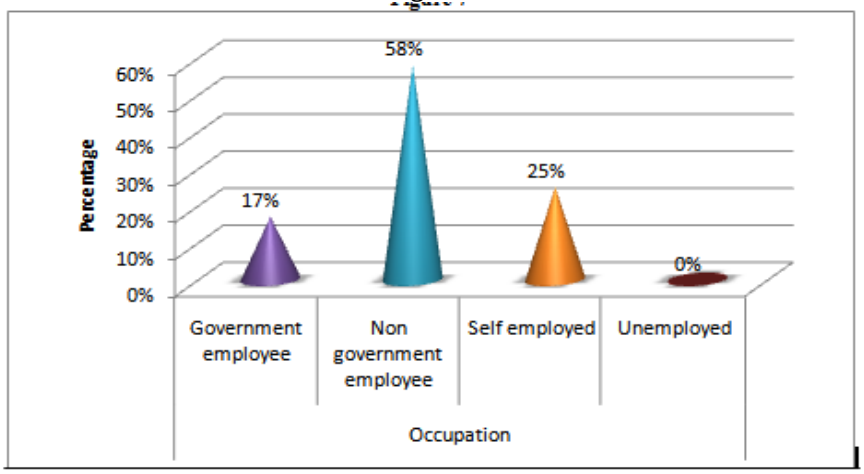


Figure 7 shows that majority of them 58(58%) were non government employee, 25 (25%) were self employed, 17 (17%) patients were government employee , and only 0(0%) were unemployed.

Table-2F Frequency and percentage distribution of the patients according to their monthly income.

n=100

Demographic variables		frequency	Percentage %
Monthly income	Less than 5000	04	04
	Rs.5001-10,000	62	62
	Rs.10,001-15,000	30	30
	15,001 and Above	4	4

Figure 8

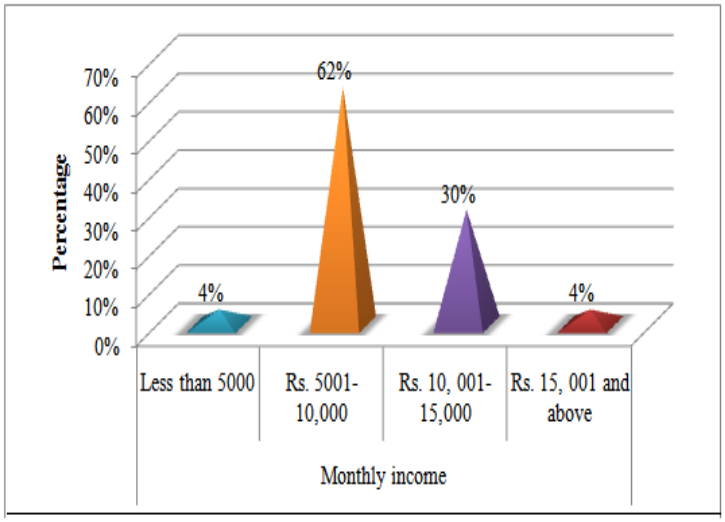
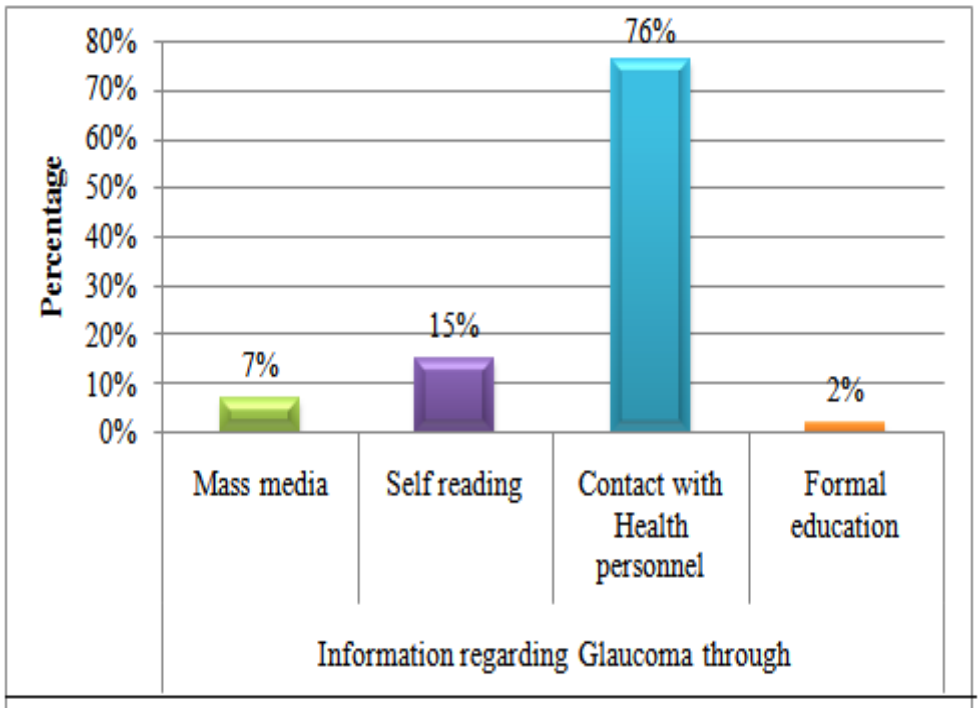


Figure 8 shows that majority of them 62(62%) were having Rs.5001-10000, 30 (30%) were having Rs.10,001-15,000 , 04(04%) of patients were having a monthly income of less than 5000, and 04(04%) were having Rs.15, 001-and above.

Table- 2G Frequency and percentage distribution of the patients according to their Information regarding glaucoma.**n=100**

Demographic variables		**frequency**	**Percentage %**
Information regarding glaucoma through	Mass media	07	07
	Self reading	15	15
	Contact with health	76	76
	Formal education	02	02

Figure 9



.Figure 9 shows that Information regarding Glaucoma and its management. It reveals that 07 patients(07%) were getting the information from mass media, 15(15%) were from self reading, 76(76%) were getting information from health personnel, and only 2(2%) from the formal education.

Table- 2H : **Frequency and percentage distribution of the patients according to their Family history of glaucoma.**

n=100

Demographic variables		**No. of subjects (N)**	**Percentage**
Family history of Glaucoma	Yes	61	61
	No	39	39

Figure 10

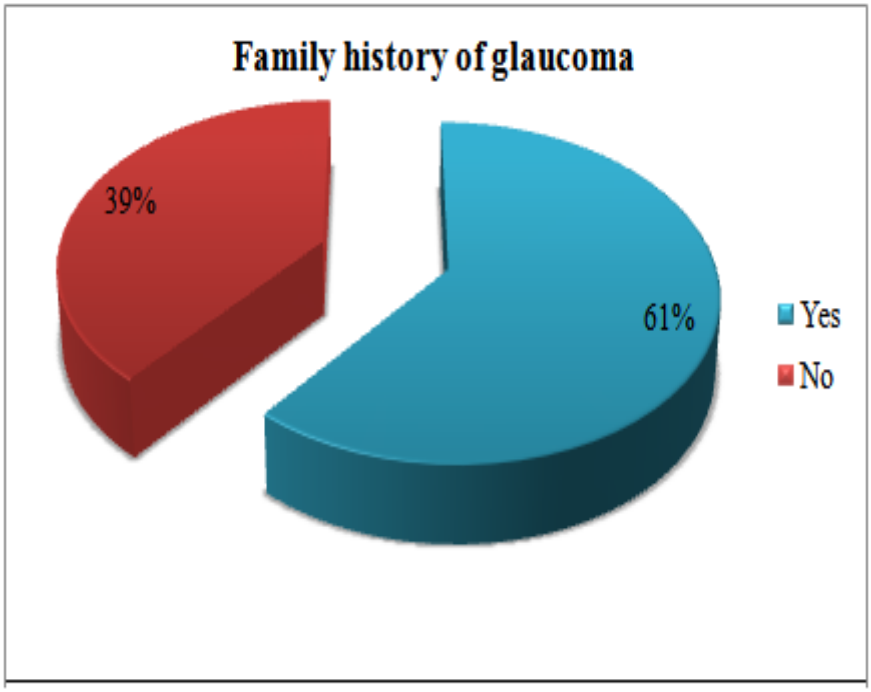


Figure 10 shows that majority of them were having family history of Glaucoma 61(61%) 39 (39%) patients were not having family history of Glaucoma .

Table-2I Frequency and percentage distribution of patients attending any training programme.
n=100

Demographic variables		**No. of subjects (N)**	**Percentage**
Attending any training programme	Yes	24	24
	No	76	76

Figure 11

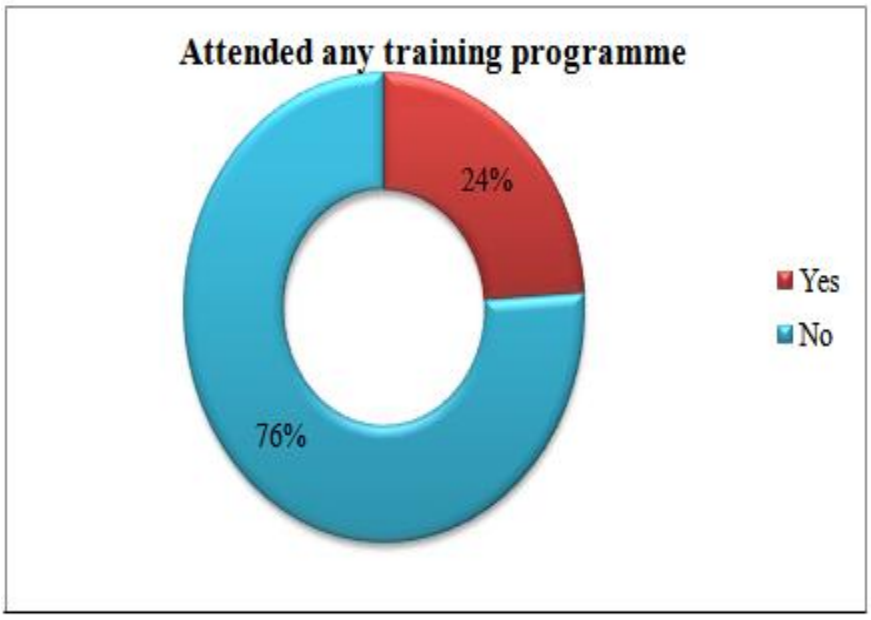


Figure 11 Shows that Regarding attending any training programme,76(76%)had not attended and 24(24%)had attended.

Section II: Assessment of knowledge regarding glaucoma and its managementamong patients with glaucoma.

In this section Researcher analyzed the knowledge level of patients regarding Glaucoma and its management.

Table 3: Mean, SD, range and mean percentage knowledge of respondents on glaucoma

N=100

Aspects	Max score	Knowledge of respondents			
		Range	Mean	SD	Mean (%)
General information	15	2-13	7.60	2.49	50.66
Prevention and management	15	1-17	7.04	3.10	46.933
Total	30	6-28	14.64	4.54	48.80

The above table shows that, the maximum mean knowledge score obtained in the assessment by patients was found in the area of general information regarding glaucoma 7.60 with standard deviation of 2.49 and prevention and management 7.04 with standard deviation of 3.10. The overall mean score of subject is 14.64 obtained with standard deviation is 4.54 and mean percentage is 48.80% obtained for overall knowledge regarding Glaucoma and its management of patients with Glaucoma.

Table 4 : Frequency and percentage distribution of patients according to their level of Knowledge

Knowledge Level	Category	Classification of respondents	
		Number	Percent
Inadequate	< 50 % Score (<15 score)	56	56
Moderate	51-75 % Score (16-23)	42	42
Adequate	> 75 % Score (24-30)	02	02

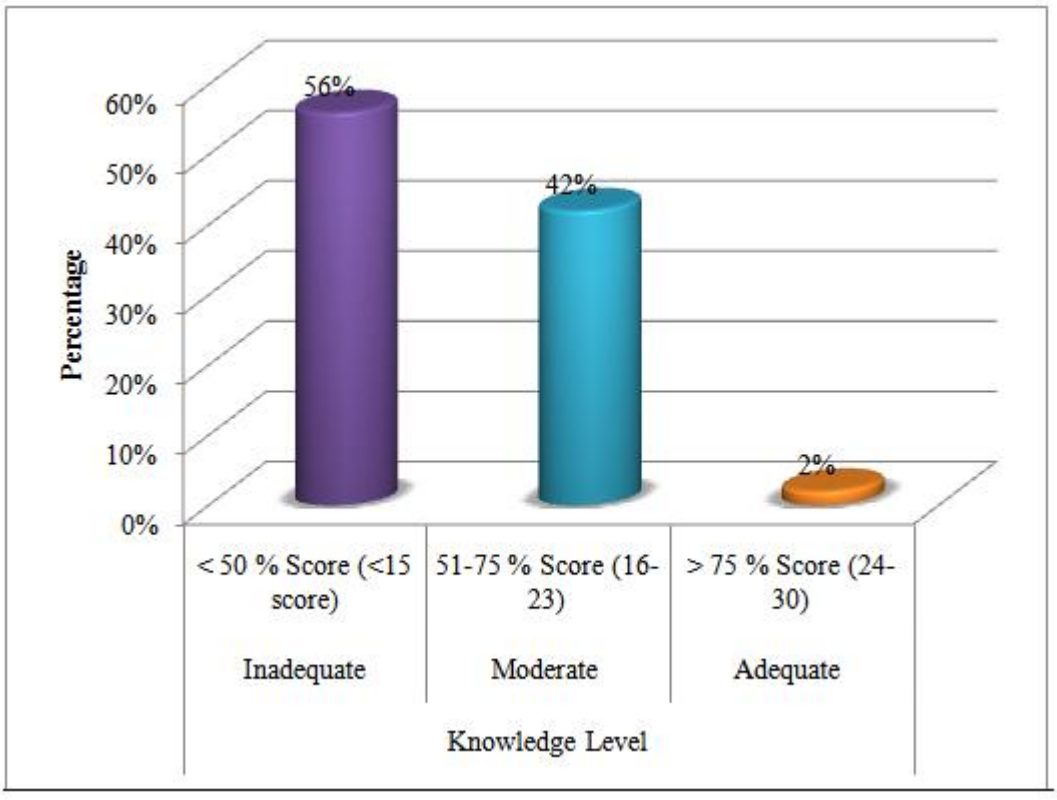


Figure 11: Frequency and percentage distribution of patients according to their level of Knowledge.

The table 4 and Figure 11 depicts the level of knowledge of the patients regarding Glaucoma and its management shows that 56(56%) patients had inadequate knowledge, followed by 42(42%) had moderately adequate knowledge and equal number of clients i.e. 2(2%) had adequate knowledge.

Section III: Association between the level of knowledge and selected socio-demographic variables

This section brings out the association between the level of knowledge with selected socio-demographic variables.

Testing of hypothesis:

To test the association between the level of knowledge and selected socio-demographic variables, the following hypothesis was formulated.

H_2: There will be a significant association between the level of knowledge with selected socio demographic variables.

Table-5

Sl. No	Demographic variables	Frequency	Knowledge level				$\chi 2$ value
			< Median 15		≥ Median 15		
			F(45)	%	F (55)	%	
1	**Age (in years)**						4.30, df=2, NS.
	21-30 years	02	0	0	2	100	
	31-40 years	03	0	0	3	100	
	41 years and above	95	45	47.36	50	52.63	
2	**Gender**						**7.05, df=1, S***
	Male	52	30	57.69	22	42.3077	
	Female	48	15	31.25	33	68.75	
3	**Place of residence**						0.60, df=1, NS
	Rural	74	35	47.29	39	52.70	
	Urban	26	10	38.46	16	61.53	
4	**Educational status**						
	Illiterate	12	10	83.33	2	16.66	**15.89, df=3, S***
	Primary school or literate	43	22	51.16	21	48.83	
	High school certificate	24	10	41.66	14	58.33	
	Intermediate	21	3	14.2857	18	85.73	
	Graduate	00	00	00	00	00	
5	**Occupation**						
	Government employee	17	9	52.94	8	47.0588	4.51, df=2, NS
	Non government employee	58	21	36.20	37	63.7931	
	Self employed	25	15	60	10	40	
	Unemployed	00	00	00	00	00	
6	**Monthly income**						6.65, df=3, NS
	Less than 5000	04	2	50	2	50	
	Rs. 5001-10,000	62	33	53.22	29	46.7742	
	Rs. 10, 001-15,000	30	10	33.33	20	66.6667	
	Rs. 15, 001 and above	4	00	00	4	100	
7	**Information regarding Glaucoma through**						
	Mass media	07	3	42.8571	4	57.14	**2.55, df=3, NS.**
	Self reading	15	7	46.66	8	53.33	
	Contact with Health personnel	76	33	43.42	43	56.57	
	Formal education	02	2	100	00	00	
8	**Family history of Glaucoma**						
	Yes	61	27	44.26	34	55.73	0.034, df=1, NS
	No	39	18	46.15	21	53.84	
9	**Attended any training programme**						0.31, df=1, NS.
	Yes	24	12	50	12	50	
	No	76	33	43.42	43	56.57	

It is evident from the Table 5 and that the Chi-square value computed for the selected socio-demographic variables with the level of knowledge indicates that there is a significant association between the level of knowledge and the variables like Gender(χ^2 =7.05),and educational status(χ^2 =15.89). There is a no significant

association between the level of knowledge and the variables like age (χ^2 =4.30), place of residence (χ^2 =0.60) , occupation(χ^2 =4.51), monthly income of the family (χ^2 =6.65), source of information(χ^2 =2.55) and family history of Glaucoma(χ^2 =0.034)and Attended any training programme((χ^2 =0.31) at p<0.05 level of significance. H_2 was accepte

III. Summary

This chapter has dealt with the analysis and interpretation of findings of the study. Both descriptive and inferential statistics were used to analyze the data. The data analysis was carried out on the basis of the objectives and hypotheses of the study. The data analysis and interpretation has been organized and presented as socio-demographic variables, knowledge of patients regarding Glaucoma and its management, association between level of knowledge and their demographic Variables. Frequency and percentage were used to analyze the socio-demographic variables, mean, mean percentage and standard deviation were used to analyze the knowledge. The association between the level of knowledge with selected socio-demographic variables was calculated using chi-square test.

Discussion is an exchange of knowledge; argument an exchange of ignorance."
— Robert Quillen

This chapter presents the major findings of the study and reviews them in relation to the findings from the other studies. The aim of the study was to assess the knowledge regarding Glaucoma and its management among patients with glaucoma in selected hospitals at Tumkur.

IV. Objectives of the study:

1. To assess the knowledge regarding glaucoma and its management among patients in selected Hospitals at Tumkur.
2. To find an association between the level of knowledge with selected sociodemographic variables.
3. To develop an Information Booklet regarding glaucoma and its management.

Hypothesis

H_1: There will be a significant association between the level of knowledge wiith selected sociodemographic variables

Major findings of the study

1. Section I: Frequency and percentage distribution of the patients according to their socio-demographic variables.
2. Section II**:** Assessment of knowledge regarding Glaucoma and its management among patients.
3. Section III: Association between the level of knowledge and selected socio-demographic variables.

Section I: Frequency and percentage distribution of the patients according to their socio-demographic variables.

1. Majority of the patients 95 (95%) were in the age group of 41 years and above, followed 3 (3%) were between the age group of 31 to 40 years, followed by 2 (2%) were between the age group of 21 to 30 years .
2. Majority of the patients 52 (52%) were males and 48 (48%) were females.
3. Majority of them 74(74%) were residing in urban area and remaining 26(26%) were residing in rural area.
4. Considering their educational status, majority of them 43(43%) were had primary education, 24 (24%)High school certificate, 12(12%)were illiterate, 21(21%) were had intermediate education, 12(12%)were illiterate, and 0(0%) were Graduate.
5. Data depicts that majority of them 58(58%) were non government employee, 25 (25%) were self employed, 17 (17%) patients were government employee , and only 0(0%) were unemployed.
6. Data shows that majority of them 62(62%) were having Rs.5001-10000, 30 (30%) were having Rs.10,001-15,000 , 04(04%) of patients were having a monthly income of less than 5000, and 04(04%) were having Rs.15, 001-and above.
7. Data indicates that Information regarding Glaucoma and its management. It reveals that 07 patients(07%) were getting the information from mass media, 15(15%) were from self reading, 76(76%) were getting information from health personnel, and only 2(2%) from the formal education.
8. Data depicts that majority of them were having family history of Glaucoma 61(61%) ,39 (39%) patients were not having family history of Glaucoma .
9. Data depticts that Regarding attending any training programme, 76(76%)had not attended and 24(24%)had attended.

Section II: Assessment of knowledge regarding Glaucoma and its management among patients.

The Results shows that, the maximum mean knowledge score obtained in the assessment by patients was found in the area of general information regarding glaucoma7.60 with standard deviation of 2..49 and prevention and management 7.04 with standard deviation of 3.10. The overall mean score of subject is 14.64 obtained with standard deviation is 4.54 and mean percentage is 48.80% obtained for overall knowledge regarding Glaucoma and its management of patients with Glaucoma. The Results shows that that 56(56%) patients had inadequate knowledge, followed by 42(42%) had moderately adequate knowledge and equal number of patients i.e 2(2%) had adequate knowledgeThe findings of the study was supported by, A cross sectional study was to evaluate the impact of an educational programme on knowledge, beliefs, practices and expectations towards glaucoma and eye care among adolescent patients with glaucoma. A purposive sample of 50 patients with glaucoma aged 12–18years, attending ophthalmology outpatient clinics in Cairo, Egypt, were given an educational programme focusing on information about glaucoma. The result shows that the programme significantly improved patients' knowledge and beliefs about glaucoma and their practices and expectations concerning eye care. The study concluded that Innovative educational programmes about eye diseases are needed to Patient adherence and medical treatment outcomes: a meta-analysis.

Section III: Association between the level of knowledge and selected socio-demographic variables.

The Chi-square value computed for the selected socio-demographic variables with the level of knowledge indicates that there is a significant association between the level of knowledge and the variables like gender (χ^2 =7.05), educational status (χ^2 =15.89).There is no significant association between the level of knowledge and the variables like Age (χ^2 =4.30), place of residence (χ^2 =0.60) , occupation(χ^2 =4.51), monthly income of the family (χ^2 =6.65), source of information(χ^2 =2.55) and family history of Glaucoma(χ^2 =0.034)and Attended any training programme((χ^2 =0.31) at $p<0.05$ level of significance. H_2 was accepted.Thus it can be interpreted that there is a significant association between the level of knowledge and all the variables like age, gender, place of residence, educational status, occupation, monthly income of the family, source of information, and family history of Glaucoma and Attending any training programme regarding glaucoma.

VII. Summary

This chapter has dealt with the discussion of the findings of the study. The points discussed are objectives and hypothesis of the study and other studies supporting the findings of the present study.

Ed north strum "Statement of the Problem 'A Study To Assess The Knowledge Regarding Glaucoma And Its Management Among Patients With Glaucoma In Selected Hospitals At Tumkur With A View To Develop An Information Booklet.'." IOSR Journal of Nursing and Health Science (IOSR-JNHS) , vol. 7, no.1, 2018, pp. 31-45.