



Research Paper

A Study to Assess Perspective on Quality of Life among Patient with Glaucoma in Selected Hospital in Puducherry

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ABSTRACT:

Glaucoma is a serious eye condition that affects millions of people worldwide, characterized by progressive damage to the optic nerve, which can lead to irreversible vision loss if left untreated. Early detection and treatment are crucial for managing the disease and preventing vision loss.

The main objective of the study to assess the perspective on quality of life among patients with glaucoma and to associate the perspective on the quality of life among patients with glaucoma with selected demographic variables. The research approach used for this study was quantitative research approach. A descriptive research design was adopted for this present study. By using convenient sampling technique, 30 patients with glaucoma were selected for the present study.

The present study reveals that majority 25 (83.3%) of them had fair quality of life, 4 (13.3%) of them had good quality of life and 1 (3.3%) had poor quality of life among patient with glaucoma.

The study findings concluded that majority of them had fair quality of life. There is no significance association between the quality of life among patients with glaucoma with demographic variables.

Glaucoma, Quality of life.

I. INTRODUCTION:

Glaucoma is a serious eye condition that affects millions of people worldwide, characterized by progressive damage to the optic nerve, which can lead to irreversible vision loss if left untreated. It is often referred to as the "silent thief of sight" because it typically develops without any noticeable symptoms until significant vision loss has occurred. This introduction will provide an overview of glaucoma, its types, risk factors, and the importance of early detection and treatment.

The optic nerve plays a critical role in transmitting visual information from the eye to the brain. In glaucoma, increased intraocular pressure (IOP) is a key risk factor, but not all individuals with elevated IOP develop the condition. There are several types of glaucoma, with primary open-angle glaucoma being the most common. This type progresses slowly and is often asymptomatic until it reaches advanced stages. Angle-closure glaucoma, on the other hand, can develop suddenly, leading to a rapid and painful increase in IOP, which demands immediate medical attention.

The exact cause of glaucoma is not fully understood, but there are several recognized risk factors, including age, family history, high intraocular pressure, and certain medical conditions like diabetes and hypertension. Early diagnosis is essential in managing the disease and preventing vision loss, which is why regular eye exams are crucial, especially for individuals at higher risk.

Quality of life (QoL) is a multidimensional concept that encompasses an individual's overall well-being and satisfaction with various aspects of their life. It goes beyond just physical health and takes into account a person's psychological, social, and environmental well-being.

Quality of life among patients with glaucoma is a critical aspect of understanding the impact of this eye condition on individuals' overall well-being. Glaucoma can affect various aspects of life, including visual function, emotional well-being, and daily activities.

Glaucoma often leads to progressive visual impairment, which can impact a person's ability to perform everyday tasks, such as reading, driving, or recognizing faces. The emotional impact of glaucoma, including anxiety and depression, can significantly affect a patient's quality of life. Coping with the fear of vision loss and managing the condition's psychological aspects is essential.

The necessity of glaucoma treatment, including eye drops and surgeries, can also influence quality of life. Adherence to treatment regimens and their impact on daily life are important considerations. Glaucoma can lead to changes in a patient's social and economic circumstances. Vision loss may result in reduced work productivity and increased dependence on caregivers, which can affect one's overall quality of life.

Support groups and patient education programs can have a positive impact on the quality of life of glaucoma patients by providing information, peer support, and strategies for coping with the condition.

NEED FOR THE STUDY

Worldwide

According to the American Academy of Ophthalmology, the global prevalence of glaucoma for the population aged 40e80 years is 3.54%. The prevalence of primary open-angle glaucoma is highest in Africa, and the prevalence of primary angle-closure glaucoma is highest in Asia. In 2013, the number of people (aged 40e80 years) with glaucoma worldwide was estimated to be 64.3 million, increasing to 76.0 million in 2020 and 111.8 million in 2040.

In the United States of America, the prevalence of open-angle glaucoma (OAG) is estimated to be 1.86%. This means that about 1.57 million white people and 398,000 black people are affected. About 3 million Americans have glaucoma. It is the second leading cause of blindness worldwide. Open-angle glaucoma is the most common form of glaucoma and results in increased eye pressure.

Glaucoma is the most common cause of irreversible blindness. Based on prevalence studies, it is estimated that 79.6 million individuals will have glaucoma in 2020. This number is likely to increase to 111.8 million individuals in 2040. At least half of those with glaucoma are unaware that they are affected. In some developing countries, 90% of glaucoma is undetected. In many cases, glaucoma may be asymptomatic. It is estimated that more than 11 million individuals will be bilaterally blind due to glaucoma in 2020.

India

In 2019, the World Health Organization reported that glaucoma caused blindness in 4.5 million people and is the second most common cause of blindness worldwide. In India, nearly 1.2 million people were blind due to glaucoma of whom 90 percent remain undiagnosed in the community.

Studies suggest that Glaucoma is the third leading cause of blindness in India. 12 million people are affected, accounting for 12.8 percent of the country's blindness. Epidemiological studies on glaucoma (2023) involving adults aged 40 years and above have estimated glaucoma prevalence between 2.7 and 4.3% among Indians.

Estimated prevalence of 2.7% to 4.3% among adults aged 40 years and older. Affected people: 12 million people, accounting for 12.8% of the country's blindness. Undiagnosed cases of 90% of cases are undiagnosed. Endemicity ranges between 1% to 58%. Higher prevalence rates recorded from Maharashtra, Tamil. Overall prevalence of primary angle closures: 1.58% in a rural population of southern India.

Tamil Nadu

A Study conducted by Govindan et al. (2021) on Glaucoma Awareness and the Source of Health Information in a Rural Population of Tamil Nadu. Among 196 respondents, 12.2 % were aware of glaucoma, 85 % were aware that it leads to blindness, 38 % had heard about glaucoma from close acquaintances through word of mouth, and 3 had undergone glaucoma evaluation in an outreach camp.

Puducherry

According to a retrospective study by Annamalai Odayappa et al. (2020), among 9,601 patients, 70.7% of patients were found to have low vision and 29.3% were found to have blindness. We note that 65% of the patients were <40 years of age. The major causes of visual impairment were retinitis pigmentosa, macular degeneration, diabetic retinopathy, pathological myopia, optic atrophy, glaucoma, albinism, and congenital nystagmus.

STATEMENT OF THE PROBLEM

A study to assess perspective on quality of life among patient with glaucoma in selected hospital in Puducherry.

OBJECTIVES OF THE STUDY

- To assess the perspective on quality of life among patients with glaucoma
- To associate the perspective on the quality of life among patients with glaucoma with selected demographic variables

II. RESEARCH METHODOLOGY:

RESEARCH APPROACH:

A quantitative research approach was adopted for the present study.

RESEARCH DESIGN:

A descriptive research design was adopted for the present study.

SETTING OF THE STUDY:

The study was conducted at Sri Manakula Vinayagar Medical College and Hospital, Puducherry

POPULATION:

The study population comprised of patient with glaucoma in selected hospital.

SAMPLE:

The study samples comprised of patient with glaucoma in selected hospital, who meet the inclusion criteria

SAMPLE SIZE:

The sample size consists of 30 patients with glaucoma in selected hospital.

SAMPLE TECHNIQUE:

A convenient sampling technique was used for the present study.

SAMPLE SELECTION CRITERIA:

Inclusion criteria:

- Patient who are suffering from glaucoma
- Patient who are willing to participate in this study

Exclusion criteria:

- Patient who are having other illness
- Patient who are not willing to participate in this study

DESCRIPTION OF THE TOOL

SECTION A:

Demographic variables include Age, gender, religion, educational status, income, Marital status, employment, types of family and if the glaucoma is an eye disorder.

SECTION B:

Vision related Quality of life questionnaire to assess the quality of life among patients with glaucoma.

| S.NO | SCORE | INTERPRETATION |
|------|-------|----------------|
| 1. | 1-10 | Good |
| 2. | 11-15 | Fair |
| 3. | 16-30 | Poor |

DATA COLLECTION PROCEDURE:

Formal approval was obtained from the SMVMCH. The purpose of the study was explained to the participants before starting the data collection. 30 patients were selected by convenient sampling technique. Informant consent was obtained. Vision related Quality of life questionnaire to assess the quality of life among patients with glaucoma. The collected data were noted. The researcher assured the participants of the confidentiality of their responses.

PLAN FOR DATA ANALYSIS:

The collected data were coded and analyzed by using descriptive and Inferential Statistics.

Descriptive statistics: Descriptive statistic was used to find the mean, standard deviation, and frequency percentage of patient with glaucoma.

Inferential statistics: Chi-squared test was used to find out the association between the perspective on the quality of life among patients with glaucoma with their selected demographic variables.

MAJOR FINDING

Regarding the age in years, 14 (46.7%) were in the age group of 41-50 years and 8 (26.7%) were above the age group of 31-40 years. In the aspect of religion, the data shows majority 23 (76.7%) were Hindu and 6 (20%) were Muslims. Regarding education status, 15 (50%) completed primary school, 9 (30%) were finished secondary school.

With regards to income majority, 18 (60%) belong to an income of Rs.11000-20000 and 9 (30%) were in the income of 5000-10,000. With regards to marital status, the data shows that the majority 28 (93.3%) were married and 2 (6.7%) were unmarried. In the aspect of employment majority, 23.3 (7%) were government

employee and 6 (20%) were private employee. In aspect of glaucoma is an eye disorder, majority 15 (50%) had said yes and 15 (50%) said no. Regarding types of family 9 (30%) were in joint family and 21 (70%) were in nuclear family.

III. RESULTS AND DISCUSSION

The study was conducted study to the perspective on quality of life among patient with glaucoma in selected hospital in Puducherry. The table 1 reveals the distribution of perspective on quality of life among patients with glaucoma. The finding shows that majority 25 (83.3%) of them had fair quality of life, 4 (13.3%) of them had good quality of life and 1 (3.3%) had poor quality of life among patient with glaucoma.

The table 2 shows the association of the perspective on the quality of life among patients with glaucoma with selected demographic variables. The result revealed that there is no significance association between Age, gender, religion, educational status, income, Marital status, employment, types of family and if the glaucoma is an eye disorder.

Table 1: Distribution of perspective on quality of life among patients with glaucoma N=50

| S.NO | Quality of life | Frequency (n) | Percentage % |
|------|-----------------|---------------|--------------|
| 1. | Good | 4 | 13.3% |
| 2. | Fair | 25 | 83.3% |
| 3. | Poor | 1 | 3.3% |

Figure 1: Percentage wise distribution of perspective on quality of life among patients with glaucoma

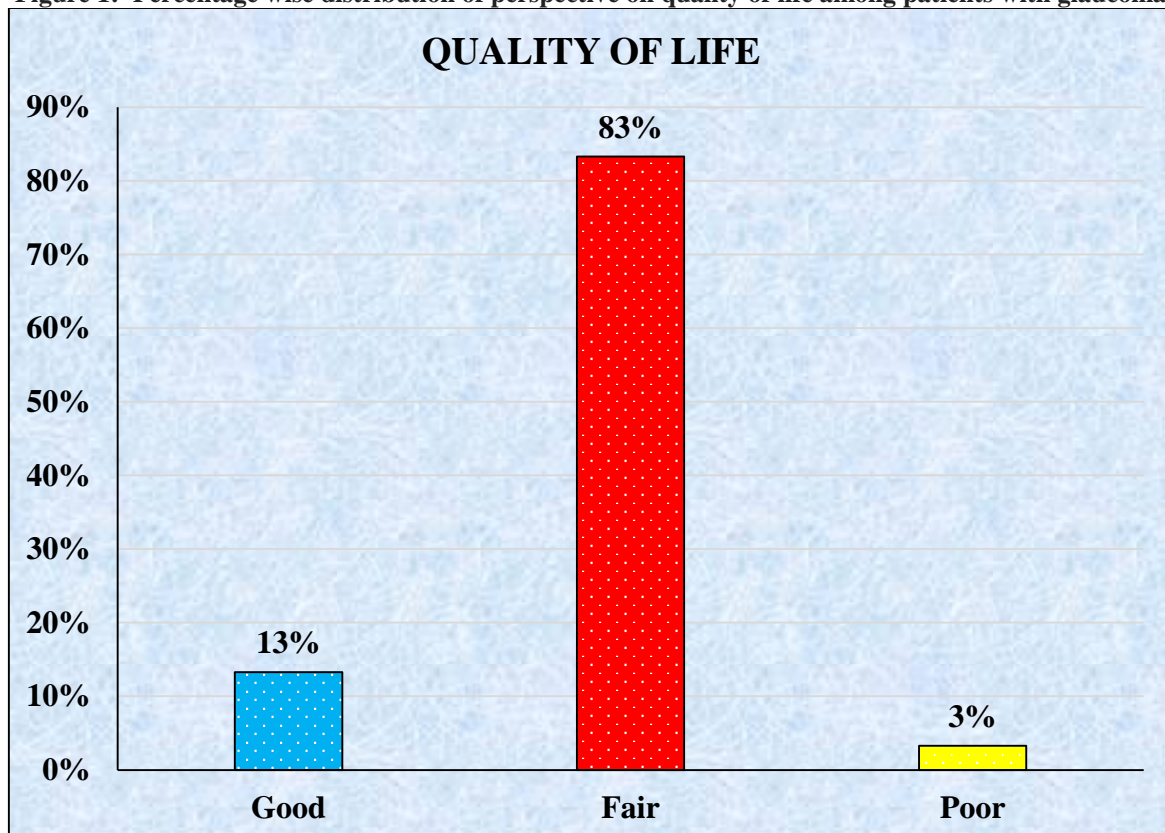


Table 2: Association of the perspective on the quality of life among patients with glaucoma with selected demographic variables. N = 50

| S.NO | Demographic variables | Level of Perception | | | | | | X ² value |
|------|-------------------------------------|---------------------|------|------|------|------|-----|---|
| | | Fair | | Good | | Poor | | |
| 1 | Age in years | N | % | N | % | N | % | X ² = 4.736 p = 0.316 (NS) |
| | a) 18-30 years | 0 | 0 | 0 | 0 | 0 | 0 | |
| | b) 31-40 years | 7 | 23.3 | 0 | 0 | 1 | 3.3 | |
| | c) 41-50 years | 12 | 40 | 2 | 6.6 | 0 | 0 | |
| | d) Above 50 years | 6 | 20 | 2 | 6.6 | 0 | 0 | |
| 2. | Sex | | | | | | | X ² = 5.300 p = 0.258 (NS) |
| | a) Male | 12 | 40 | 0 | 0 | 1 | 3.3 | |
| | b) Female | 13 | 43.3 | 4 | 13.3 | 0 | 0 | |
| 3. | Religion | | | | | | | X ² = 0.524 p = 0.971 (NS) |
| | a) Hindu | 19 | 63.3 | 3 | 10.0 | 1 | 3.3 | |
| | b) Muslims | 5 | 16.7 | 1 | 3.3 | 0 | 0 | |
| | c) Christian | 1 | 3.3 | 0 | 0.0 | 0 | 0 | |
| 4. | Education status | | | | | | | X ² = 3.920 p = 0.417 (NS) |
| | a) Primary school | 12 | 40.0 | 3 | 10.0 | 0 | 0.0 | |
| | b) Secondary school | 7 | 23.3 | 1 | 3.3 | 1 | 3.3 | |
| | c) Higher secondary school | 6 | 20.0 | 0 | 0.0 | 0 | 0.0 | |
| | d) Graduates | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | |
| 5. | Income | | | | | | | X ² = 3.800 p = 0.434 (NS) |
| | a) 5000-10,000 | 6 | 20.0 | 2 | 6.7 | 1 | 3.3 | |
| | b) 11,000-20,000 | 16 | 53.3 | 2 | 6.7 | 0 | 0 | |
| | c) 21,000-30,000 | 3 | 10.0 | 0 | 0.0 | 0 | 0 | |
| | d) Above 50,000 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | |
| 6. | Marital status | | | | | | | X ² = 0.429 p = 0.807 (NS) |
| | a) Married | 23 | 76.7 | 4 | 13.3 | 1 | 3.3 | |
| | b) Unmarried | 2 | 6.7 | 0 | 0 | 0 | 0 | |
| | c) Widow | 0 | 0 | 0 | 0 | 0 | 0 | |
| | d) Single | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7. | Employment | | | | | | | X ² = 6.160 p = 0.406 (NS) |
| | a) Government employee | 6 | 20.0 | 1 | 3.3 | 0 | 0.0 | |
| | b) Private employee | 4 | 13.3 | 1 | 3.3 | 1 | 3.3 | |
| | c) Farmer | 8 | 26.7 | 0 | 0.0 | 0 | 0.0 | |
| | d) Unemployed | 7 | 23.3 | 2 | 6.7 | 0 | 0.0 | |
| 8. | Types of family | | | | | | | X ² = 1.238 p = 0.538 (NS) |
| | a) Joint family | 7 | 23.3 | 2 | 6.7 | 0 | 0 | |
| | b) Nuclear | 18 | 60.0 | 2 | 6.7 | 1 | 3.3 | |
| 9. | If the glaucoma is an eye disorder? | | | | | | | X ² = 1.040 p = 0.595 (NS) |
| | a) Yes | 13 | 43.3 | 2 | 6.7 | 0 | 0 | |
| | b) No | 12 | 40.0 | 2 | 6.7 | 1 | 3.3 | |

*p<0.05 - Significant; p<0.01 - Highly Significant

IV. CONCLUSION:

The present study assessed the perspective on quality of life among patient with glaucoma in selected hospital in Puducherry. The study findings concluded that there is no significance association between Age, gender, religion, educational status, income, Marital status, employment, types of family and if the glaucoma is an eye disorder. There is no significance association between Age, gender, religion, educational status, income, Marital status, employment, types of family and if the glaucoma is an eye disorder.

V. RECOMMENDATIONS:

- Same study can be conducted with large samples.
- Same study to can be conducted regarding knowledge on glaucoma among public.

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