



KNOWLEDGE AND ATTITUDE OF DIABETIC PATIENTS UNDERGOING CATARACT SURGERY.

Ophthalmology

Dr Vandna Sharma

ABSTRACT

Background: Diabetes mellitus (DM) is a chronic systemic disease that has increased in prevalence over time. It can affect all ocular structures, with cataract being the most common ocular complication. Cataract is the leading cause of blindness worldwide. Due to several mechanisms, there is an increased incidence of cataract formation in the diabetic population.

Aim: To assess knowledge and attitude of diabetic patients scheduled for cataract surgery.

Methods: Sixty-nine patients were included in the study, visiting Ophthalmology department at regional hospital, Bilaspur. Knowledge and attitude of the study subjects were evaluated using a questionnaire. Data was expressed as frequency and percentages.

Results: 91.3% of the patients responded that they were known about "Safed Motia". For 68.1% of the patients, source of information was media followed by health workers (31.9%). 78.3% of the patients responded that age is one of the factors for causation of cataract. 20.3% of the patients reported that superstitions are the cause of cataract. 84% of the patients responded that they will like to visit a specialized medical facility for treatment. Overall 84% of the study subjects had excellent knowledge and 17.4% of the subjects had positive attitude.

Conclusion: There is a need for exploring the myths regarding cataract and its surgery through various activities as there is large gap in public's knowledge and understanding of cataract blindness.

KEYWORDS

Diabetes mellitus, cataract, knowledge and attitude

BACKGROUND

Diabetes mellitus (DM) is a fastest emerging epidemic globally.¹ It is a vicious pathology affecting the macro and the microvascular components of different target organs. As a result, it has climbed up the ranking to also become one of the top causes of vision loss.² In 2017, nearly half-a-billion people are estimated to be living with diabetes with low and middle-income countries carry almost 80% of the diabetes burden.³ This is almost quadruple the number within a period of around 35 years but reports suggest that we are a long way from achieving a control. Cataract is one of the major causes of visual impairment in diabetic patients.⁴ Patients with DM are reported to be up to five times more likely to develop cataract, in particularly at an early age.^{5,6} Due to the increasing prevalence of DM, the incidence of diabetic cataracts has also risen. Cataract extraction is one of the most common surgical procedures among the general population, and the number of cataract surgeries each year also continues to increase. There is a poor access to information and treatment of cataract in these patients. Therefore, the present hospital-based study was carried out to assess the knowledge, attitude and practices regarding cataract and its surgery in diabetic patients undergoing cataract surgeries in Bilaspur district in Himachal Pradesh.

It has been assumed that there is a poor access to the causation and treatment of cataract in cataract blinds and when some information on these aspects is available, they don't know where to go for surgical services.

Therefore, the present study was carried out to assess the knowledge, attitude and practices regarding cataract and its surgery in rural and urban cataract cases in Rohtak district in Haryana. It has been assumed that there is a poor access to the causation and treatment of cataract in cataract blinds and when some information on these aspects is available, they don't know where to go for surgical services.

Therefore, the present study was carried out to assess the knowledge, attitude and practices regarding cataract and its surgery in rural and urban cataract cases in Rohtak district in Haryana.

PATIENTS AND METHODS

The study was conducted at the regional hospital, Bilaspur between 2019 and 2020. Diabetic patients who attended eye department of the hospital were requested to participate in the study. Those who agreed were enrolled in this study. A face-to-face interview-based questionnaire was used in this study. The first part of the questionnaire retrieved information related to the patient profile such as age, gender, duration of diabetes, type of diabetes, diabetes control, cataract screening, medical facility for eye treatment and whether or not the any physician referred the patient to ophthalmologist. The second part of the questionnaire covered the responses to questions related to knowledge and attitude for cataract surgery. This questionnaire was in

English and Hindi. Participants were allowed to choose one of five responses to each question. Data were entered into excel sheet and calculated. Data was presented in the form of frequency, percentage, mean, and standard deviation.

RESULTS

During the study period, 69 diabetic patients scheduled for cataract surgery were included in the study. Majority of the patients (56.5%) aged above 60 years followed by 27.5% patients aged between 51 and 60 years. Only 2.9% patients aged less than 40 years (Figure 1). Male to female ratio was 4.3:1. 81.2% of the patients were males (Figure 2). 97.1% of the patients belonged to rural background (Figure 3). 82.6% of the study participants were literate (Figure 4). 92% of the patients had type II diabetes.

DIAGNOSIS

88.4% of the study subjects were diagnosed with bilateral cataract while the remaining 11.6% patients had unilateral cataract.

Knowledge and attitude

91.3% of the patients responded that they were known about "Safed Motia". For 68.1% of the patients, source of information was media followed by health workers (31.9%). 78.3% of the patients responded that age is one of the factors for causation of cataract. 20.3% of the patients reported that superstitions are the cause of cataract. 84% of the patients responded that they will like to visit a specialized medical facility for treatment. Overall 84% of the study subjects had excellent knowledge and 17.4% of the subjects had positive attitude.

DISCUSSION

It becomes difficult to sit back and relax when 3.8 million Indians are blinded by cataract annually⁷ and curable blindness backlog is increasing day by day. There is always a definite need for better quality information, education and communication on eye care to reach the public so that existing facilities can be availed. People may be unaware of the possibilities to get their sight restored through operation. Thus, to explore the knowledge and attitude of the people towards cataract surgery; this study was conducted.

In this study of diabetic patients scheduled for cataract surgery, approximately, more than half of participants had an excellent knowledge regarding cataract surgery. However, only 17% of the subjects had a positive attitude towards cataract surgery. There could be some barriers for some patients visiting such as distance from residence to the hospital and non-referral by local physicians. The fear of intervention, complacency and with job-related stresses could be the important barriers for these patients in our study.

Health promotion strategies should focus on imparting knowledge on the importance of annual eye screening, especially in the patients with

long-standing diabetes. In an earlier study, the lack of referral by physicians for annual diabetes screening demonstrated that primary healthcare staffs do not judiciously follow the protocol.⁸ One of the limitations of our study is sample size, and also, we could associate factors which could be affecting the knowledge and attitude of these patients.

In conclusion, an awareness programme must be made to make mass more educated about the surgery along with affordable and within reach treatment options. Additionally, these patients must be educated that their diseases can be cured which could also be helpful in improving their quality of life.

REFERENCES

1. Global report on diabetes. World Health Organization. ISBN 978 92 4 156525 7 (NLM classification: WK 810)(website (<http://www.who.int>))(Accessed Feb 2020).
2. Zheng Y, He M, Congdon N. The worldwide epidemic of diabetic retinopathy. *Indian Journal of Ophthalmology*. 2012;60:428-31.
3. IDF DIABETES ATLAS Eighth edition 2017 .Online version of IDF Diabetes Atlas: www.diabetesatlas.org ISBN: 978-2-930229-87-4) (Accessed Feb 2020).
4. Drinkwater JJ, Davis WA, Davis TME. A systematic review of risk factors for cataract in type 2 diabetes. *Diabetes Metab Res Rev*. 2019;35:e3073
5. Klein BE, Klein R, Wang Q, Moss SE. Older-onset diabetes and lens opacities. The Beaver Dam Eye Study. *Ophthalmic Epidemiol*. 1995;2:49-55
6. Saxena S, Mitchell P, Rochtchina E. Five-year incidence of cataract in older persons with diabetes and pre-diabetes. *Ophthalmic Epidemiol*. 2004;11:271-7
7. Registrar General and Census Commissioner of India. Census of India 1991, Provisional Population Totals, page 1 & 2
8. Al-Alawi A, Al-Hassan A, Chauhan D, Al-Futais M, Khandekar R. Knowledge, Attitude, and Perception of Barriers for Eye Care among Diabetic Persons Registered at Employee Health Department of a Tertiary Eye Hospital of Central Saudi Arabia. *Middle East Afr J Ophthalmol*. 2016;23:71–74.