

Original Research Article

Awareness about diabetes mellitus and diabetic retinopathy in patients with diabetes mellitus

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ABSTRACT

Background: Awareness about diabetes mellitus and diabetic retinopathy in patients with diabetes mellitus.

Methods: 50 patients of diabetes mellitus attending Pandit Deendayal Upadhyay Medical College, Rajkot, Gujarat, India, were randomly selected during January 2017 to March 2017. 11-point questionnaire obtained on detailed search of literature on published reports were administered by interviewers well versed in English and Gujarati.

Results: Total of 50 patients were randomly selected. 42% - females and 58% - males. Mean age - 58.5 years. Age range 40 to 71 years. Patients with good sugar control - 26% and poor control - 74%. 94% of the patients were taking treatment for DM and 6% were not on any treatment. 48 % of the patients were illiterate, 10% were graduate and 42% had education below 12th standard. 50% were aware about DM affecting the eye .38% had taken eye treatment and 62% had not. 26% were aware of DM affecting eye inspite of good control and 26 % aware of the need of check-up in poor control. 40% aware of the complications related to DM.

Conclusions: Better literacy rates is contributory to public awareness, however trend for poor practice needs to be radically changed with aggressive public motivation emphasizing the necessity of screening and follow ups.

Keywords: Awareness, Diabetes mellitus, Diabetic retinopathy

INTRODUCTION

Diabetic retinopathy constitutes 4.8% of the global cause for blindness with reported prevalence in India ranging from 7.3% to 25%.¹ Diabetic retinopathy being a silent disease, early detection and timely intervention is important for its management.^{2,3} This study was conducted to assess the knowledge and attitude of the general population regarding diabetes mellitus and diabetic retinopathy with an aim to understand the shortcomings in awareness programs. Patients selected at random from the out-patient attendance in Pandit Deendayal Upadhyay Medical College, Rajkot, Gujarat, India, department of ophthalmology during January 2017 to March 2017.

METHODS

50 patients of diabetes mellitus attending Pandit Deendayal Upadhyay Medical College, Rajkot, Gujarat, India, department of ophthalmology were randomly selected during January 2017 to March 2017. 11-point questionnaire obtained on detailed search of literature on published reports were administered by bilingual interviewers well versed in English and Gujarati (local language). Answers were in yes/no/do not know format. Eye examination was carried out undertaking vision, slit lamp examination and ETDRS classification of diabetic retinopathy after fundus examination. Statistical analysis was carried out with Microsoft and SPSS. $P < 0.05$ considered significant.

RESULTS

Total of 50 patients were randomly selected. 42%-females and 58% - males. Mean age - 58.5 years. Age range 40 to 71 years.

Patients with good sugar control -26% and poor control - 74%. 94% of the patients were taking treatment for DM and 6% were not on any treatment. 48 % of the patients were illiterate, 10% were graduate and 42% had education below 12th standard. 50% of the patients were aware about DM affecting the eye. 38% had taken eye treatment and 62% had not taken any eye treatment. 26% were aware of DM affecting eye inspite of good control and 26 % aware of the need of check-up in poor control. 40% aware of the complications related to DM.

Table 1: Source of awareness of complications.

Source of awareness	No. of patients
Relatives	16
Family	29
Doctor	3
Self-aware	2

Table 2: Awareness of frequency of follow up in DM for eye check-up.

Frequency	No. of patients
6 months	5
1 year	9
2 years	2
Only when vision decreases	34

Table 3: Awareness of treatment of diabetic retinopathy.

Awareness of treatment of DR	No. of patients
Do not know	24
Good control	20
Laser	1
Laser+ surgery	1
Laser+ surgery+ good control	4

Table 4: Reason for eye screening.

Reason for eye screening	No. of patients
Doctor's referral	43
self	7

Table 5: Reason for not getting screened for DR earlier.

Reason for not getting screened earlier	No. of patients
No complications	8
Not aware	36
Not applicable	6

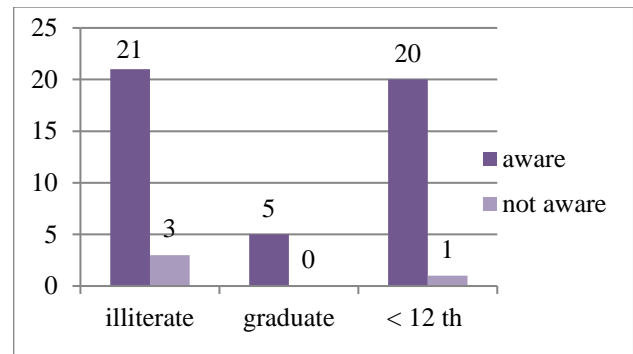


Figure 1: Correlation of awareness of treatment of DM with literacy.

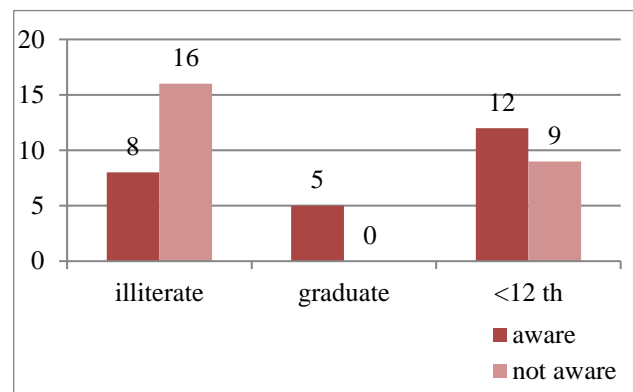


Figure 2: Correlation of awareness of treatment of eye with literacy.

DISCUSSION

It is well known that prolonged duration of disease results in various disease associated complications mainly because of ignorance and poor disease control, thus contributing to disease related morbidity. The main objective was to ascertain awareness level and practice patterns of people.^{3,7,8}

In present study patients with good sugar control -26% and poor control - 74%. 94% of the patients were taking treatment for DM and 6% were not on any treatment. 48 % of the patients were illiterate, 10% were graduate and 42% had education below 12th standard. 50% of the patients were aware about DM affecting the eye. 38% had taken eye treatment and 62% had not taken any eye treatment. 26% were aware of DM affecting eye inspite of good control and 26 % aware of the need of check-up in poor control. 40% aware of the complications related to DM.

According to Chennai urban rural population study 19% of the population and 40.6% of diabetics were aware that DM could produce complications.in study by Rani et al 49.9% individuals had knowledge about DM and 37.1% about DR. They attributed literacy for better knowledge.⁷

In study by Hussain R. 66% knew about complications and significant association between literacy and awareness of DR. In 36% of people had information about DM from treating doctors.⁸

CONCLUSION

Better literacy rates are contributory to public awareness, however trend for poor practice needs to be radically changed with aggressive public motivation emphasizing the necessity of screening for retinopathy and follow ups.

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Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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