

Occurrence of Dry Eye: An Urban Slum Based Study

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Introduction

Dry eye is a frequent ocular problem in the middle and elderly population and is often under diagnosed.

Aims and objectives

To find out the occurrence of dry eye in an urban slum eye hospital outpatient population, identify the socio-demographic profile, risk factors for development of dry eye.

Materials and methods

A cross sectional study, conducted at the Rotary Eye Hospital in a resettlement colony of Trilokpuri, Delhi. Study included patients of age 40 and above and willing to participate. Patients previously diagnosed with dry eye and drug treatment for the same, recently operated patients and those with complaints of pain, redness etc were excluded. The McMonnies questionnaire was used to evaluate symptoms and their frequency. Objective methods (Schirmer-I and Tear Break-up time) of dry eye assessment were then applied to evaluate the tear film. Particulars of the patients along with chief complaints and relevant ophthalmic examination were recorded.

Results and discussion

The sample size comprised of 32 patients aged between 40 to 70 years. The occurrence of dry eye was 21.88% as inferred by the McMonnies questionnaire. According to the Schirmer-I and BUT tests, which are the objective methods, 21 patients (65.62%) were labeled as dry eye. Dry eye in age group of 40-50yrs was maximum (34.37%), it was significantly higher in females, 2.5:1 (p value= 0.002). The occupation profile was as follows- Housebound people which includes housewives, tailors and retired (71.42%), Farmers/Labourers (23.8%), Drivers/Cooks (4.7%). Mean TV viewing hours were 2.33+2.03 hrs and that for exposure to Sun was 4.61+2.71 hrs. Due to low literacy level of the study population, the reliability of the McMonnies questionnaire in this cohort is questionable.

Conclusion

Our study reveals that this disorder is common in urban slums. The objective tests like Schirmer-I and BUT should be carried out regularly for early diagnosis and prevention of further complications of dry eye. Increasing duration of exposure to Sun and TV viewing predispose to dry eye therefore avoiding such modifiable risk factors is essential.

Keywords: Dry eye; Mcmonnies questionnaire; Schirmer-I; BUT.