

## Study of Incidence of Ocular Manifestations in Patients Having Psychiatric Elements



### Medical Science

**KEYWORDS :** OCULAR MANIFESTATIONS, PSYCHIATRIC DISORDER, GHQ

**DR. KAMAL R. DODIYA**

ASSOCIATE PROFESSOR. DEPARTMENT OF OPHTHALMOLOGY, P.D.U. GOVT. MEDICAL COLLEGE, RAJKOT

**DR. HARDIK D. JIVANI**

SENIOR RESIDENT DOCTOR, DEPARTMENT OF OPHTHALMOLOGY, P.D.U. GOVT. MEDICAL COLLEGE, RAJKOT

**DR. BHOLESH RATNA**

RESIDENT DOCTOR, DEPARTMENT OF OPHTHALMOLOGY, P.D.U. GOVT. MEDICAL COLLEGE, RAJKOT

### ABSTRACT

*Study Of Incidence Of Ocular Manifestations In Patients Having Psychiatric Elements. Aim & objectives of the study:- Study of incidence of ocular manifestations in patients having psychiatric elements. Materials and methods: This study is carried out on 1000 patients, attending out patient department at department of Ophthalmology, P. D. U. Govt. Medical College, Rajkot. The study was planned to be done during the period of October 2012 to April 2014. Result & analysis: GHQ score was significantly higher between the range of 41 to 65 years of age. GHQ score was found to be higher in males (57.09%) as compared to females (42.91%). Urban males are highly prone to have positive GHQ scores (60%) as compared to rural males (40%). No any significant difference in incidence of psychiatric elements in relation to locality (Urban-27.8% and Rural-25.7%) and socio-economical class (Upper-24.0%, Middle-27.3% and Lower-27.3%). GHQ score was higher in patients with professional job (35.6%) and having business (38.69%). GHQ score was similarly positive in all three class with average of 31.0%. No any significant difference in positive GHQ score in relation to locality.*

*Conclusion: incidence of psychiatric elements is more in male patients (esp. Urban males) coming to ophthalmic out patient department.*

### INTRODUCTION:

The practice of ophthalmology and psychiatry meet over in several aspects of patients diagnosis, management and therapy. The ophthalmologist should be able to recognize signs and symptoms of psychiatric disorder. Non organic disorders could have ophthalmologic manifestations related both the afferent system and motor system related symptoms. Ophthalmologist should aware of conditions like functional vision loss and visual field loss, voluntary nystagmus, spasm of near reflex, non organic disturbance of eyelid function, ocular and facial sensation and psychosomatic disease of eye. Many of the drugs used in psychiatry may cause ophthalmological side effects. These drugs can affect retina, optic nerve, higher visual centre, cornea, lens, ocular motor system and intra ocular pressure. Thalidomide used in 1950s was known to cause congenital ocular defect. Psychological reaction and psychiatric complications are well known after cataract surgery. Other than these problems there are psychiatric disorders which can present ophthalmologic signs and symptoms.

Psychological and functional visual dysfunction is never a diagnosis only of exclusion of organic factors, but also presence of positive findings of stressors or psychological factors are required to make a diagnosis. Also, it is not enough to demonstrate that the patients responses are non psychological. It only helps as an adjunct and acts as confirmatory evidence of non organic disorder.

The patient with psychogenic complaint involving visual dysfunction may present with involvement of the afferent system or efferent system.

Therefore it is very important to find out the origin of the patient's symptoms, whether it has psychiatric origin or any other else.

The recognition of psychiatric illness by physicians and surgeons comes about either by the doctor noticing some cue that suggests psychological disorder or because the patient's complaints cannot be accounted for by known organic disease. In ei-

ther case the doctor must be able to follow up with appropriate questions which will enable him to make a confident diagnosis of a psychiatric disorder. GHQ is a well known instrument for measuring minor psychological distress and has been translated into a variety of languages however it is important to note that it is not a tool for indicating a specific diagnosis but it is a useful screening test to detect psychiatric element of the patient. Therefore, it is very important to identify and diagnose such cases so that treatment can be instituted as early as we can.

**Aim & OBJECTIVES OF THE STUDY:-** Study of incidence of ocular manifestations in patients having psychiatric elements.

-To determine the incidence of ocular manifestations in patients having psychiatric elements.

-To determine the epidemiological status of the patients with ocular manifestations & psychiatric elements.

### MATERIALS AND METHODS:

This study is carried out on 1000 patients, attending out patient department at department of Ophthalmology, P. D. U. Govt. Medical College, Rajkot. The study was planned to be done during the period of October 2012 to April 2014.

### INCLUSION CRITERIA :-

-All the patients attending out patient department at department of Ophthalmology, P. D. U. Govt. Medical College, Rajkot, during period of October 2012 to April 2014, with non-specific eye complains, were being evaluated.

-Patients from 18 years of age to 65 years of age were included.

### EXCLUSION CRITERIA :-

-All the patients who had serious physical debilitating illness were excluded.

-If the patient or relative cannot provide reliable details due

to current mental state or any other reason, that patient will be excluded.

-When patients or relatives cannot communicate in Gujarati, Hindi or English, they were excluded.

-If the patient or relative didn't give informed consent, they were excluded.

-If patient who was on any local or systemic medication which was responsible for his or her complaints, they were excluded.

-All the patients having positive occupational history which are related to the patients complaints, they were excluded.

-All the patients whose symptoms can be justified with presence of associated signs and clinical findings.

All the patients attending out patient department at department of Ophthalmology, P. D. U. Govt. Medical College, Rajkot, with non-specific eye complains, were being evaluated. All patients underwent basic ophthalmological examinations, starting from –

**- Detailed ocular & systemic history.**

-visual acuity with snellens distant vision chart.

-Anterior segment examination by slit-lamp.

-Posterior segment examination with direct ophthalmoscopy and also with indirect ophthalmoscopy & ultrasonography, as and when required.

-IOP(Intra Ocular Pressure) measurement with schiottz tonometer.

-sac-syringing.

-fluorescent staining of cornea & tear-film etc.

All the patients , with no significant co-relation between symptoms & clinical findings, had to undergo GHQ (General Health Questionnaire), containing basic questions in local language (gujarati,) through which psychiatric component of the patients can be checked. For control, study of 200 patients, of which 108 were males and 92 were females, complaining of decreased vision due to refractive errors, was also done.

For control study, all the patients coming to our out patient department, with complaining of decreased vision(for distant and/or near) and apparently normal anterior segment of eye, were evaluated for refraction by auto-refractometry & subjective correction.

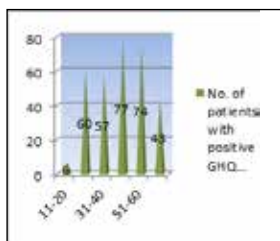
If patients was found to have refractive error and vision was improved fully with correction , this patient had also been evaluated for any psychiatric element for its presence, with the help of GHQ(General Health Questionnaire).

**RESULT & ANALYSIS:**

No. of patients with positive GHQ score in specific age group among cases

Sex of patients	No. of patients with positive GHQ score
Male	181
Female	136

Sex of patients	No. of patients with positive GHQ score
Male	04
Female	05



Above Fig. shows no. of patients with positive GHQ score in specific age group among cases

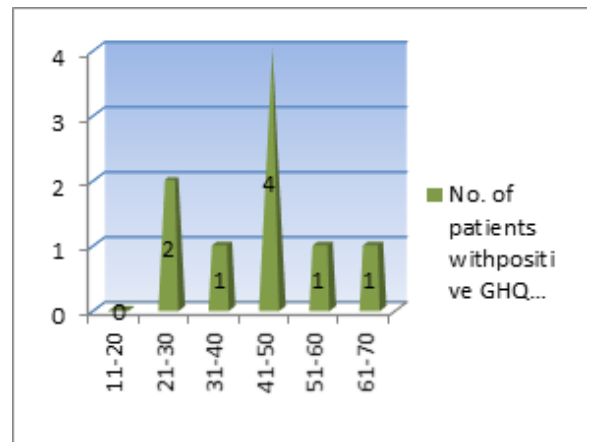
No. of patients with positive GHQ score in specific age group among controls

Above Fig. shows no. of patients with positive GHQ score in specific age group among controls

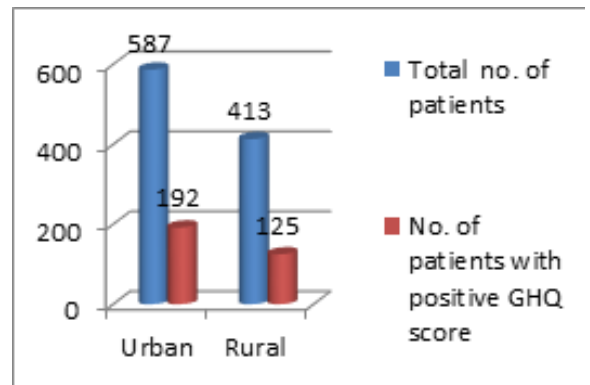
No. of patients with positive GHQ score in specific sex among cases

No. of patients with positive GHQ score in specific sex among controls

No. of patients with positive GHQ score in relation whether they came from URBAN or RURAL area among cases



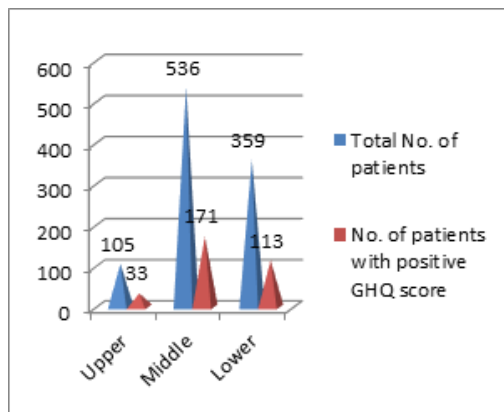
below Fig. shows that there is no any significant difference in the incidence of GHQ positive scores URBAN or RURAL people among cases



No. of patients with past history of psychiatric illness in cases and controls.

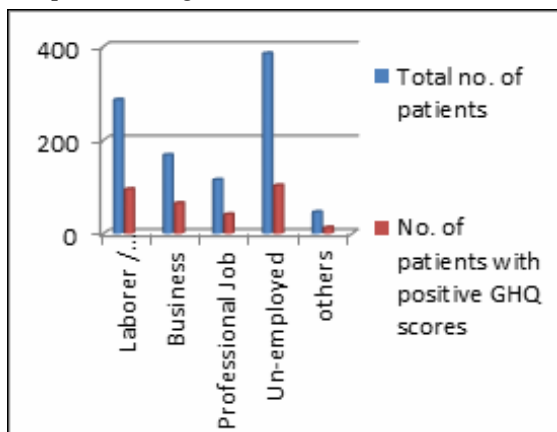
	Total no. of patients	No. of patients with P/O psychiatric illness
Cases	1000	157
controls	200	07

No. of patients with positive GHQ score in relation whether they came from Upper, Middle or Lower socio-economic class among cases



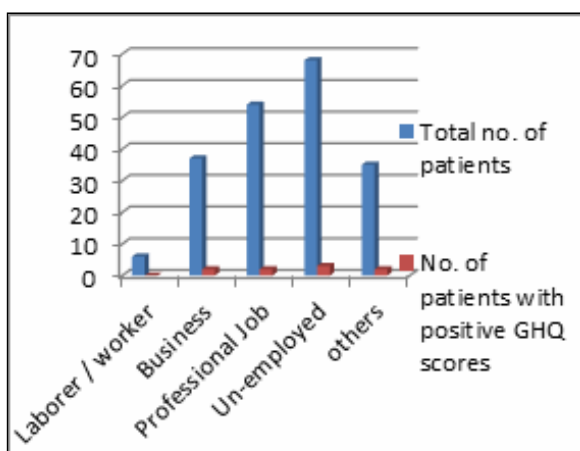
Above Fig shows there is no any significant difference in the incidence of psychiatric elements in relation whether patients came from Upper, Middle or Lower socio-economic class among cases.

**No. of patients with positive GHQ score in relation to the occupation among cases**



Above Fig shows No. of patients with positive GHQ score in relation to the occupation among cases

**No. of patients with positive GHQ score in relation to the occupation among controls**



Above Fig shows No. of patients with positive GHQ score in relation to the occupation among controls.

**DISCUSSION: -**

It is evident that patient may present with symptoms which are usually eventually labeled ' PSYCHIATRIC' in a

variety of general practice; out patient and in patient clinical settings. They are fairly commonly seen in ophthalmic practice also. Ophthalmic outpatients without physical signs have been shown, as a group, to have psychiatric component significantly higher than a control group. They also have a higher incidence of somatic complaints of a kind commonly made by patients with psychiatric disorder. There is a higher incidence of past psychiatric history in the case group also in comparison to control group. Among the case group, there were 495 males(49.5%) & 505 females(50.5%). Their mean age was 45.05years.

According to age :-GHQ score was significantly higher between the range of 41 to 65 years of age.

According to sex :-GHQ score was found to be higher in males (57.09%) as compared to females(42.91%).

•Among males:-Urban males are highly prone to have positive GHQ scores(60%) as compared to rural males(40%).Those males doing business have higher GHQ score(46.80%) as compared to those with other occupations & unemployed males. There is no any significant difference in the incidence of psychiatric elements in relation whether patient came from Upper, Middle, Lower socio-economical class.

•Among females:-No any significant difference in incidence of psychiatric elements in relation to locality (Urban-27.8% and Rural-25.7%) and socio-economical class (Upper-24.0%, Middle-27.3% and Lower-27.3%). But GHQ score was found to be higher in females doing professional job (34.0%) as compared to those doing other occupations &/or unemployed.

According to occupation :-GHQ score was higher in patients with professional job (35.6%) and having business (38.69%).

According to socio-economic class:-GHQ score was similarly positive in all three class with average of 31.0%.

According to locality:-No any significant difference in positive GHQ score in relation to locality.

**CONCLUSION:**From our study it is clear that incidence of psychiatric elements is more in male patients (esp. Urban males) coming to ophthalmic out patient department. Also positive GHQ score is more common in patients having occupation with somewhat responsibilities such as business, professional job etc. But we can not say directly that occupation is responsible for these psychiatric elements. It may be because of tremendous work load/job pressure OR may be because of the fact that these patients are somewhat educated & can give valid reply to GHQ screening test rather than those poorly educated patients who can not give valid reply to GHQ screening test upto that extent. So, to exclude that factor further study needs to be conducted.

**REFERENCES:**

1. Psycho ophthalmology: the interface between psychiatry and ophthalmology, Kirtana Rajsekar, Y. L. Rajsekar & Santosh K. Chaturvedi, *Indian Journal of Psychiatry*, 1999, 41 (3),186-196
2. Ki Woong Kim, Sang Beom Han, Eun Ryung Han, Se Joon Woo, Jung Jae Lee, Jong Chul Yoon and Joon Young Hyon (*Invest Ophthalmol Vis Sci*. 2011;52:7954-7958) DOI:10.1167/ iovs.11-8050
3. Karseras AG, Psychiatric aspects in ophthalmology. In: Howells JG, ed. *Modern perspectives in psychiatric aspects of surgery*. New York: Brunner/Mazzel, 1976: 206-24.
4. Adams GL, Pearlman JT, Sloan SH. Psychosomatic ocular irritation.

- American Journal of Psychiatry 1970; 127:539.
5. Baksheev G N, Robinson J, Cosgrave E M, Yung A R. Validity of the 12-item General Health Questionnaire (GHQ-12) in detecting depressive and anxiety disorders among high school students. *Psychiatry research*. 2011 May 15;187(1-2):291-6.
  6. Bhahari M S, Rahim A A, Yacoob M J. The sensitivity, specificity and reliability of the malay version 12-items general health questionnaire in detecting distressed medical students. *ASEAN Journal of Psychiatry*, Jan – June 2009, Vol.11 (1).
  7. Gureje O, Obikoya B. The GHQ-12 as a screening tool in a primary care  
Pevalin D J. Multiple applications of the GHQ-12 in a general population sample: an investigation of long-term retest effects. *Social Psychiatry and psychiatric epidemiology*, 2000 Nov;35(11):508-12.
  8. The validity of general health questionnaires, GHQ-12 and GHQ-28, in mental health studies of working people. ZOFIA MAKOWSKA, DOROTA MERECZ, AGNIESZKA MOŚCICKA and WOJCIECH KOLASA, *International Journal of Occupational Medicine and Environmental Health*, Vol. 15, No. 4, 353–362, 2002.
  9. Follow up of 42 cases (for non organic visual loss). *Archives of Ophthalmology*, 101,729-735.
  10. Visual acuity and reported eye problems among psychiatric in-patients- article published in london by-Bhaskar Punukollu, Specialist Registrar in Adult and Community Psychiatry email: michael.phelan@wlmht.nhs.uk