



PSYCHIATRIC CO-MORBIDITIES IN THE PATIENTS UNDERGOING CATARACT SURGERY

Vandna Sharm., Rajesh Sharma and Neeraj Kanwar

Regional Hospital, Bilaspur (Himachal Pradesh)

ARTICLE INFO

Article History:

Received 12<sup>th</sup> August, 2019  
Received in revised form 23<sup>rd</sup> September, 2019  
Accepted 7<sup>th</sup> September, 2019  
Published online 28<sup>th</sup> November, 2019

Key words:

Cataract, HADS, Anxiety, Depression

ABSTRACT

**Background:** Cataract is the leading cause of reversible blindness worldwide, and has impact on the mental health of these patients.

**Aim:** To study psychiatric comorbidities in patients undergoing cataract surgery.

**Methods:** A total 81 patients undergoing cataract surgery were enrolled at regional hospital, Bilaspur. Sociodemographic variables and risk factors were collected. Psychiatric comorbidities were assessed using Hospital and anxiety scale (HADS). Data were presented as frequency and percentages.

**Results:** Anxiety was the most common psychiatric comorbidity in 13.6% patients and depression was present in 9.9% patients.

**Conclusion:** Further studies with large sample size are required to collect further information of psychiatric illness and associated risk factors.

Copyright©2019 Vandna Sharma et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

In the patients undergoing surgery, psychiatric comorbidity could be associated with longer hospital stays, higher risk of suboptimal outcomes, and increased resource utilization.<sup>1</sup> The most common psychiatric disorders include anxiety and depression. It has been suggested that psychiatric comorbidities in the patients undergoing cataract surgery is due to suffering due to the anesthesia, fear of blindness following surgery, and worry about self in case of any adverse outcome.<sup>2</sup>

Cataract is a leading cause of reversible blindness globally. Therefore, it becomes important to evaluate psychiatric comorbidities in these patients as cataract has been found to be associated with psychiatric disorders in older adults.

MATERIALS AND METHODS

This observational study was conducted from September 2018 to Aug 2019 at regional hospital, Bilaspur, Himachal Pradesh. Patients scheduled for cataract surgery were included in the study. Those refused to participate in the study were excluded.

The patients were subject to a detailed clinical history and physical examination. History of the presence of risk factors such as smoking, hypertension, and diabetes mellitus were collected.

Psychiatric co-morbidities were assessed using Hospital Anxiety and Depression Scale (HADS) scale.

\*Corresponding author: Rajesh Sharma

Regional Hospital, Bilaspur (Himachal Pradesh)

HADS is a self-report scale made up of 14 four-point scaled items designed to detect anxiety and depression in general medical outpatients.<sup>3</sup> It has two sub-scales, seven for anxiety (HADS-A) and depression (HADS-D). Anxiety subscale items are 2,4,6,8,11,12 and 14 while the depression subscale items are 1, 3, 5, 7, 9, 10 and 13. For the scoring, each item is scored from 0-3 making the maximum score per scale to be 21. Scores between 0 and 7 are generally regarded as “normal,” while those above 8 and 10 are regarded as “doubtful cases”. Scores between 11 and 21 are regarded as “abnormal cases.”

Data were presented as frequency, percentage, and mean.

RESULTS

General characteristics

Out of 81 patients, majority of the patients (60.5%) aged between 61 and 80 years. There were only 1.2% patients aged below 40 years. 65% of the patients were males. Male to female ratio was 1.89:1. 37% patients had secondary level of education while only 3% of the patients were graduated. 60% of the patients were unemployed and 97.5% of the patients were married.

Table 1 General characteristics of the study population

		Frequency	Percentage
Age	21-40 Years	1	1.2
	41-60 Years	31	38.27
	61-80 Years	49	60.49
Sex	Male	53	65.43
	Female	28	34.57
	No Education	19	23.46
Education	Primary Education	29	35.80
	Secondary Education	30	37.04
	Graduate or above	3	3.70

Occupation	Employed	32	17.28
	Unemployed	49	39.50
Marital Status	Married	79	60.49
	Unmarried	2	97.53
			2.46

It was found 63% of the patients were consuming alcohol while 28% of the patients were smokers

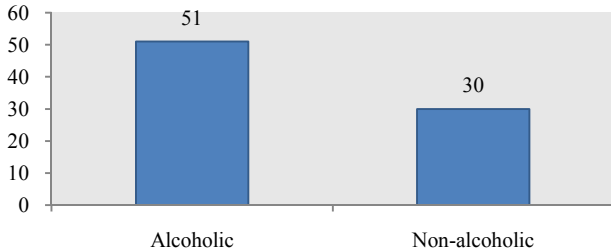


Figure 1 Distribution of patients on the basis of alcohol abuse

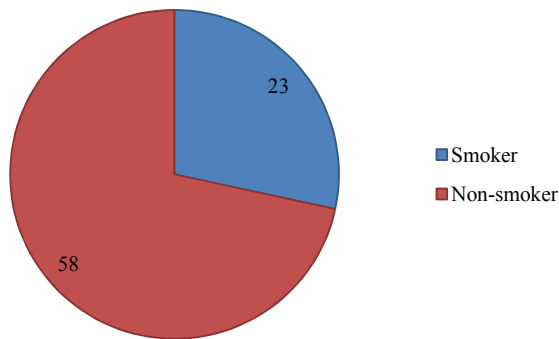


Figure 2 Distribution of patients on the basis of smoking

**HADS Score**

HADS evaluation for anxiety showed that 13.6% patients had anxiety while 5% patients had doubtful anxiety. Remaining patients had no anxiety.

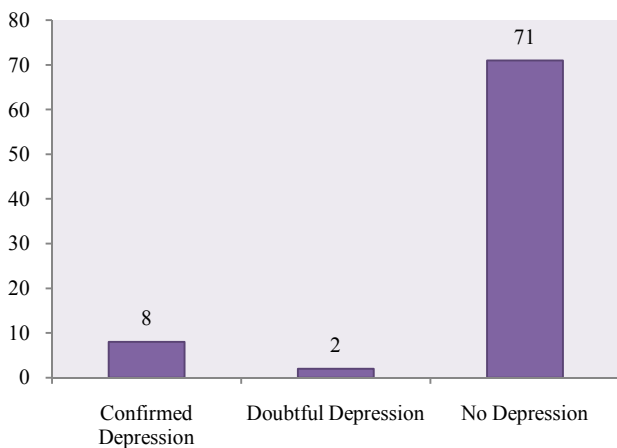


Figure 4 Distribution of patients on the basis of HADS-depression

HADS evaluation for depression showed that 9.9% patients had depression, 2.5% had doubtful depression, and remaining patients had no depression.

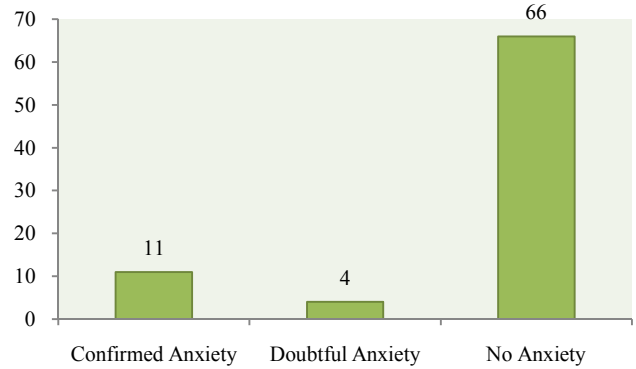


Figure 3 Distribution of patients on the basis of HADS-anxiety

**DISCUSSION**

This study was designed to investigate psychiatric comorbidities among patients scheduled for cataract surgery at Regional hospital, Bilaspur, Himachal Pradesh. The findings of this study showed that only 13.6% of the participants experienced anxiety while the 9.9% experienced depression. These findings are different from findings from other studies, and also vary from country to country. Previous studies have shown high preoperative anxiety rates ranging from 11% to 80%<sup>4-6</sup>. The possible reasons for these high rates of preoperative psychopathology include fear of going blind, dying or developing complications from the cataract surgery, fear of blood transfusion or permanent disability after surgery and fear that nobody will take care of their family in case death from surgery.<sup>7</sup> However, it has been demonstrated scientifically that if comorbid anxiety or depression were recognized and treated pre or postoperatively, they could reduce the risk for postoperative delirium.

In our study, 9.9% patients had depression which is lower than previously reported surgeries. It has been reported that that elderly patients scheduled for elective surgery have preoperative prevalence rates of depression between 15% and 20%.<sup>8</sup> These rates were also found to be even higher than those of the general population.<sup>8</sup> The possible reason for high prevalence of depression among the elderly who are scheduled for elective surgery could be due to the presence of mild to moderate psychiatric symptoms such as anxiety or depression before surgery.<sup>8</sup> Likewise, high degrees of depression could also lead to higher anesthetic and analgesic requirement, prolonged hospital stay, delayed recovery and increased and postoperative pain.<sup>9,10</sup>

Although this study provided scientific data regarding the psychiatric comorbidity among patients scheduled for cataract surgery, it also has its limitations which could be addressed in future research. The sample size was relatively small and the study was conducted in a secondary care hospital. Also, we did not measure association of different risk factors with the psychiatric comorbidities.

**CONCLUSION**

Anxiety and depression are the most common psychiatric disorder in the patients undergoing cataract surgery. Treatment of this condition is required in time to prevent further complications.

## References

1. Beresnevaitė M, Benetis R, Taylor GJ, Jurėnienė K, Kinduris Š, Barauskienė V. Depression predicts perioperative outcomes following coronary artery bypass graft surgery. *Scand Cardiovasc J*. 2010;44:289-94
2. Akinsulore A, Owojuyigbe AM, Faponle AF. Assessment of preoperative and postoperative anxiety among elective major surgery patients in a tertiary hospital in Nigeria. *M.E.J. Anesth* 2015;23:235-240
3. Zigmond, AS, Snaith RP. The Hospital Anxiety and Depression Scale. *Acta Psych Scand* 1983; 67: 361-370.
4. Jeon S, Kim HS. Clinical characteristics and outcomes of cataract surgery in highly myopic Koreans. *Korean J Ophthalmol* 2011; 25:84–89.
5. Ebirim L, Tobin M. Factors responsible for preoperative anxiety in elective surgical patients at a University Teaching Hospital: A pilot study. *Internet J Anesthesiol*, 2010; 29(2):1-5.
6. Kain ZN, Severino F, Alexander GM, *et al*. Preoperative anxiety and postoperative pain in women undergoing hysterectomy: A repeatedmeasures design. *J Psychosom Res*; 2000; 49:417-422
7. Meuleners LB, Hendrie D, Fraser ML, *et al*. The impact of first eye cataract surgery on mental health contacts for depression and/or anxiety: a population-based study using linked data. *Acta Ophthalmol* 2013; 91(6): 445-449.
8. Tully PJ, Baker RA. Depression and anxiety and cardiac morbidity outcomes after coronary artery bypass surgery: a contemporary and practical renew. *J Geriatric Cardiol*, 2012; 9: 197-208.
9. Ursea R, Feng MT, Zhou M, Lien V, Loeb R. Pain perception in sequential cataract surgery: comparison of first and second procedures. *J Cataract Refract Surg* 2011; 37(6): 1009-14.
10. Jaing L, Zhang K, Wenwen H, Zhu *et al*. Perceived Pain during Cataract Surgery with Topical Anesthesia: A Comparison between First-Eye and Second-Eye Surgery. *J Ophthalm* 2015; Article ID 383456:

### How to cite this article:

Vandna Sharma *et al* (2019) 'Psychiatric Co-Morbidities in the Patients Undergoing Cataract Surgery', *International Journal of Current Advanced Research*, 08(11), pp. 20502-20504. DOI: <http://dx.doi.org/10.24327/ijcar.2019.20504.4008>

\*\*\*\*\*