Leading Causes of New Patient Consults at the Out-Patient General Eye Clinic of the Sentro Oftalmologico Jose Rizal, Philippine General Hospital

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ABSTRACT

Objective. To determine the current leading causes of new patient consults at the out-patient general clinic of the Department of Ophthalmology and Visual Sciences (DOVS), Sentro Oftalmologico Jose Rizal (SOJR).

Methods. The data were gathered from the DOVS out-patient general clinic monthly census. Compilation and tabulation of the diagnoses of all new patients from January to December 2009 were done.

Results. The leading causes of new patient consults were cataract (30.8%), error of refraction (20.1%), pterygium (6.1%), conjunctivitis (4.9%), dysfunctional tear syndrome (4.5%), glaucoma (4.3%), diabetic retinopathy (3.7%), and hypertensive retinopathy (3.4%).

Conclusion. Cataract and error of refraction comprise the majority of all causes of consultation among new patients.

Key Words: cataract, error of refraction

Introduction

Blindness remains to be a public health problem in developing countries according to the World Health Organization (WHO).¹ The global initiative of the WHO is to bring down the prevalence of blindness. Results of the most recent national survey of blindness in the Philippines reported that cataract is the most common cause of blindness and error of refraction is the most common cause of low vision.²

The Philippine General Hospital (PGH) is considered to be the largest government hospital with the most number of patient consultations in the country. The DOVS of the PGH transferred from ward 12 of the main hospital building to its present location at the SOJR starting in 2005. The SOJR is a

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state of the art facility donated by the Kingdom of Spain to help address the problem of blindness. The number of patients served by the DOVS greatly increased ever since the relocation to the SOJR.³

A search of the local literature regarding causes of visual complaints among patients consulting for the first time at the out-patient eye clinic (new patient) in the PGH revealed three articles which were reported in 1923,⁴ 1953⁵ and 1971.⁶ Since then, there has been no additional information published.

This study aimed to determine the current leading causes of new patient consults at the out-patient general clinic of the DOVS, SOJR, PGH.

Methods

This retrospective study was a compilation of the new patient monthly census at the DOVS, PGH out-patient general clinic. The new patient monthly census included the first consult diagnosis directly responsible for the patient's chief complaint. When two or more diseases were involved, these co-existing diseases were taken into consideration and recorded. We compiled and tabulated the diagnoses of all new patients recorded from January to December 2009.

In 2006, the DOVS transferred all its services to the SOJR. The data from the annual reports of the DOVS from 2006 to 2008 were compared.⁷

Results

A total of 10,750 new patient consults from the outpatient general clinic of the DOVS, SOJR, PGH were seen in 2009. Table 1 shows the leading causes of new patient consults. Cataract was the most common condition and comprised 30.8% of all cases. Error of refraction was second accounting for 20.1%. Completing the top five causes were pterygium (6.1%), conjunctivitis (4.9%) and dysfunctional tear syndrome (4.5%). The rest of the leading causes were glaucoma (4.3%), diabetic retinopathy (3.7%), and hypertensive retinopathy (3.4%).

Table 2 shows the leading causes of new patient consults in 2009 compared to 2008, 2007 and 2006. The leading causes from 2006 to 2008 were generally similar compared to 2009. Cataract was also the number one cause followed by error of refraction.

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Table1. Leading causes of new patient consults in 2009

Causes	Number of consults	Percent	
1. Cataract	3,305	30.8	
2. Error of refraction	2,219	20.1	
3. Pterygium	655	6.1	
4. Conjunctivitis	526	4.9	
5. Dysfunctional tear syndrome	471	4.5	
6. Glaucoma	456	4.3	
7. Diabetic retinopathy	385	3.7	
8. Hypertensive retinopathy	366	3.4	
Others	2,367	22.2	
Total	10,750	100	

Discussion

The WHO in 2002 reported that the number of people with visual impairment worldwide was estimated to be in excess of 161 million.⁵ More than 90% of visually impaired people live in developing countries. Cataract is responsible for 48% of the world's blindness.

In 2009, cataract was the leading cause of new patient consults seen in the DOVS, SOJR, PGH. The second most common cause was error of refraction. Cataract (30.8%) and error of refraction (20.1%) when combined formed the majority (50.9%) of new patient eye consults. Other causes had a comparatively lower incidence. These were anterior segment eye diseases which included pterygium, conjunctivitis, and dysfunctional tear syndrome. Posterior segment eye diseases such as glaucoma, diabetic retinopathy, and hypertensive retinopathy followed.

Table 2 reveals that cataract was consistently the most frequent cause of new patient consults from 2006 to 2009. Cataract comprised about thirty percent of all new patient consults for the past four years. Error of refraction was also consistently the second most common cause. The recent opening of an optical shop in the SOJR resulted in a threefold increase in 2009 of patients consulting with error of refraction. Pterygium and conjunctivitis were usually in the top five causes. A significant increase of dysfunctional tear syndrome in 2009 was noted compared to the previous years. This may be attributed to the setting up of a separate clinic for dry eye patients. Glaucoma, diabetic retinopathy and hypertensive retinopathy showed an increasing trend.

In previous literature, Fernando reported that conjunctivitis was the leading cause of new patient consults in 1918-296 and 1952-537 (Table 3). In 1968-70, Mangubat reported that error of refraction significantly increased and was the most frequent cause.8 Our report shows that cataract followed by error of refraction are currently the most common causes of eye consultations among new patients in PGH. There has been shift from а infectious causes to error of refraction to cataract through the years. The main reasons are the growing elderly population, **Table 2.** Leading causes (percent) of new patient consults in2009 compared to 2008, 2007 and 2006

Causes	2009 (%)	2008 (%)	2007 (%)	2006 (%)
1. Cataract	30.8	36.8	29.6	29.1
2. Error of refraction	20.1	8.1	8.5	6.7
3. Pterygium	6.1	5.6	5.4	5.8
4. Conjunctivitis	4.9	4.6	4.5	2.1
5. Dysfunctional tear syndrome	4.5	2.5	2.6	2.6
6. Glaucoma	4.3	3.8	3.3	2.8
7. Diabetic retinopathy	3.7	2.8	2.7	1.7
8. Hypertensive retinopathy	3.4	2.7	2.7	2.1
Others	22.2	33.1	40.7	47.1
Total	100	100	100	100

Table 3. Leading causes (percent) of new patient consults in2009 compared to 1968-70, 1952-53 and 1918-29

Causes	2009(%)	1968-70(%)	1952-53(%)	1918-29(%)
1. Cataract	30.7	8.8	7.4	3.8
2. Error of refraction	20.1	27.2	12	5
3. Pterygium	6.1	4.7	5	NA
3. Conjunctivitis	4.9	14.6	13	21
5. Dysfunctional tear syndrome	4.5	NA	NA	NA
6. Glaucoma	4.3	1.2	1.7	0.9
7. Diabetic retinopathy	3.7	0.2	NA	NA
8. Hypertensive				
retinopathy	3.4	0.2	NA	NA

NA – no actual data was reported because cases were significantly few

the greater demand for perfect vision because of more demanding daily visual tasks, and the advances in cataract surgery and refractive procedures. Dysfunctional tear syndrome, glaucoma, diabetic retinopathy and hypertensive retinopathy consultations have been steadily increasing because of the availability of early detection and screening procedures as well as the growing public awareness of these eye diseases.

This study about the current leading causes of new patient consults at the out-patient general clinic of the SOJR echoes the results of the national survey of blindness that cataract is the most common cause of blindness and error of refraction is the most common cause of low vision. It also reveals that eye diseases seen in the PGH is a microcosm of the visual problems in the entire Philippines. Visual impairment due to cataract and error of refraction are remediable. Blindness and visual disability when detected and treated early can be prevented. Therefore, the cataract and refraction services must remain an important priority of the SOJR in its commitment in providing excellent eye care. The DOVS should actively continue its efforts to implement the cataract backlog programs and the prevention of blindness activities of the Department of Health in coordination with the WHO Vision 20/20 global strategy to eliminate the avoidable causes of blindness by the year 2020.⁹

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