



**Libyan International Medical University
Faculty of Basic Medical Science**

Prevalence and Causes of Visual Impairment and Blindness , Cataract Surgical Coverage and Outcomes of Cataract Surgery

Submitted by: Bushra Moftah Rashid

Supervisor: Dr.Ghanem eltwati

Date of submission: 30\6\2018

Report submitted to fulfill the requirement of 3rd year of Basic Medical Science

Abstract :

aim of this report to estimate the prevalence and causes of blindness in different area(Libya , china , brazile) , population, age , and to describe the coverage and quality of cataract surgery services in the area.

Introduction:

A cataract is a clouding of the lens in the eye which leads to a decrease in vision , cataract often develop slowly and can affect one or both eyes, symptoms may include faded color , blurry vision and trouble seeing at night, cataract causes half of all cases of blindness 33% of visual impairment.

Most commonly due to aging or present from birth or occur following eye surgery for other problem.

The underlying mechanism involves accumulation of clumps of protein or yellow brown pigment in the lens.¹

Discussion

-First study: random sample study was conducted in the four regions of Libya, a total of 8538 persons aged ≥ 50 years were examined across the four regions, The prevalence of blindness was 3.25%, which varied across the regions (2.94–3.80%). Major causes of blindness were cataract (29%), glaucoma (24%) and other corneal scars (14%). Causes were similar across all regions except in the south. Avoidable causes were responsible for 60.6% of blindness. Major causes of visual impairment were cataract (31.2%), diabetic retinopathy (16.6%) .Cataract surgical coverage among was 95.4%, with no sex differences. About 38% of cataract-operated eyes had poor outcome even after best correction (35%). The major barriers to service uptake were “waiting for maturity” (26%), “unaware of treatment” (24%).²

-Second study: Data were obtained from Shanxi Province, China, The prevalence of visual impairment and blindness in Shanxi was estimated to be 0.6% among persons up to 80 years old. The prevalence in rural areas (0.7% was significantly higher than that in urban areas (0.4% and was higher in females (0.8% than in males 0.4%. The most common cause of visual impairment and blindness was cataract (44.9%), followed by retinopathy and choroidopathy (12.5%), hereditary and developmental disorders (10.3%), corneal disease (5.2%).³

-Third study: Blindness in Campinas, Brazil was found in 1.98 % (2.03 % among male, and 1.94 % among female). The prevalence of blindness varied with age, from 0.2%, in the group from 50 to 54 years, to 7.2% in those above 80. Cataract was the main cause of blindness (40.2%) , diabetic retinopathy (15.9%), and glaucoma (11.4%). The cataract surgical coverage was of 93%. The main reasons the subjects did not receive surgical treatment were: fear of undergoing surgery, 11.1%; lack of awareness about the condition, 16.7%; waiting for maturity, 16.7%; and contraindication to surgery, 44.4% .⁴

Conclusions

-We found Libya needs to improve the quality of cataract surgery across all the regions. The southern region needs improvement in both quality and coverage of services.

- In china Prevalences of visual impairment and blindness in women and in rural areas were higher than in men and urban areas, and increased with age. Cataract was the most prevalent cause of visual impairment and blindness. Based on the findings from this study.

- In Campinas, Brazil Cataract is the major cause of blindness in Campinas. Education on eye diseases, their prevention and treatment must become part of the city's public healthcare policies.

References:

1-Visual impairment and blindness fact sheet N282. 23 May 2015

2-RABIU, M. M., JENF, M., FITURI, S., CHOUDHURY, A., AGBABIAKA, I. AND MOUSA, A. Prevalence and Causes of Visual Impairment and Blindness, Cataract Surgical Coverage and Outcomes of Cataract Surgery in Libya 25 Jan 2013.

3-Prevalence and Causes of Visual Impairment and Blindness in Shanxi Province, China 28 July 2015.

4-LEITE ARIETA, C. E., DE OLIVEIRA, D. F., DE CARVALHO LUPINACCI, A. P., NOVAES, P., PACCOLA, M., JOSE, N. K. AND LIMBURG, Hataract Remains an Important Cause of Blindness in Campinas, Brazil 8 July 2011.