



# CLINICAL EPIDEMIOLOGY OF RETINOBLASTOMA IN THE PHILIPPINE CHILDREN'S MEDICAL CENTER: JANUARY 2014 TO JUNE 2022: A RETROSPECTIVE ANALYSIS



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## INTRODUCTION

Retinoblastoma is the most common ocular cancer encountered in children. In 2013, 43% of all cases was in the Asia – Pacific Region. A low survival rate (53%) and increasing incidence rate through the years has been observed in the Philippines. This study's objective was to determine epidemiologic data of retinoblastoma in the Philippine Children's Medical Center to add to the limited pool of data regarding retinoblastoma in the country.

## METHODS

This was an analytical study using retrospective chart review of retinoblastoma patients seen at the Division of Surgery, Section of Ophthalmology from January 2014 – June 2022.

The data was analyzed based on: demographics, number of cases from January 2014 – June 2022, year upon diagnosis, presenting sign, laterality, clinical stage, treatment received, and mortality.

## RESULTS

Seventy eight patients (111 eyes) with Retinoblastoma were included. The mean age was 21.62 months and majority were male with bilateral disease. Majority had advanced disease (Group E) upon presentation requiring enucleation. Overall incidence rate was 3.60%. Age-stratified incidence rate of those at 0 – 24 months had a significantly higher incidence ( $z=6.86$ ,  $p=0.001$ ).

Sex-stratified incidence rates were higher for females, but was not statistically significant ( $z=1.57$ ,  $p=0.116$ ). Overall mortality rate was 37.81%. Age, sex and laterality had no effect on the mortality rate.

## CONCLUSION

The study showed that most Retinoblastoma cases seen were advanced and that despite the advancement of treatment, mortality rate was still high. Public health measures should be enacted to focus on increasing awareness to aid in early detection and treatment of this disease.

## KEYWORDS

Retinoblastoma; PCMC; Philippines