

OCULAR HEALTH STATUS OF PRIMARY  
SCHOOL CHILDREN IN ILORIN,  
NIGERIA

BY

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# **OCULAR HEALTH STATUS OF PRIMARY SCHOOL CHILDREN IN ILORIN, NIGERIA**

A DISSERTATION SUBMITTED TO THE NATIONAL POSTGRADUATE MEDICAL COLLEGE OF NIGERIA IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF FELLOWSHIP OF THE COLLEGE IN OPHTHALMOLOGY (FMCoph), NOVEMBER 2007.

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**NOVEMBER 2007**

## **DECLARATION**

I hereby declare that this work is original unless otherwise acknowledged. It has neither been presented to any other college for a Fellowship nor submitted elsewhere for publication.

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**Date**

# ATTESTATION

This is to certify that Dr Ayanniyi Abdul-kabir conducted this study  
under our supervision

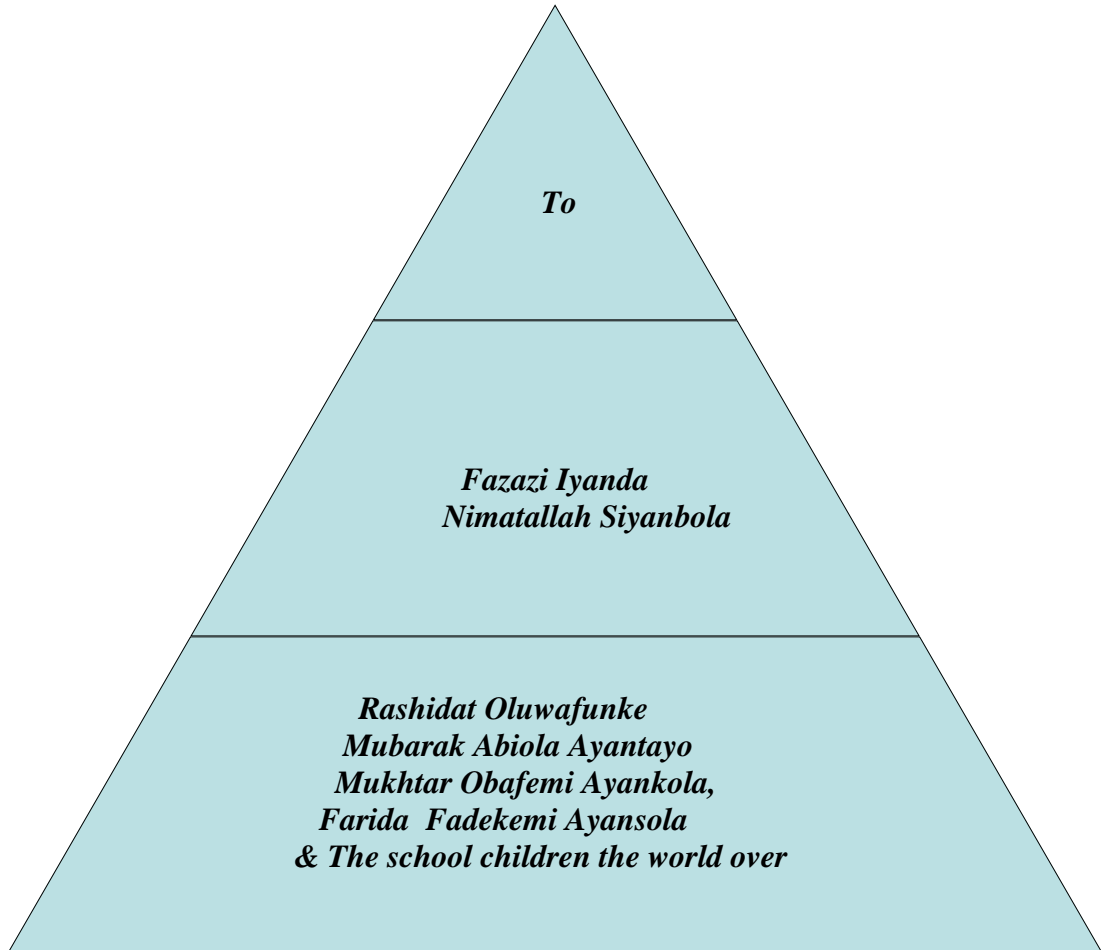
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# DEDICATION



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Gratitude, the least of virtue; ingratitude the worst of vices. My special thanks go to the duo of Drs Mahmoud AO and Olatunji FO who patiently supervised this work.

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## ACRONYMS

AIDS	=	Acquired Immune Deficiency Syndrome
BB	=	Bilateral Blindness
BSVI	=	Bilateral Severe Visual Impairment
BVI	=	Bilateral Visual Impairment
CF	=	Counting Finger
DALY	=	Disability Adjusted Life Year
GMT	=	Greenwich Mean Time
HbSC	=	Haemoglobin SC
HbSS	=	Haemoglobin SS
IE	=	Ilorin East
ILGEAs	=	Ilorin Local Government Areas
IS	=	Ilorin South
IW	=	Ilorin West
JPOAG	=	Juvenile Primary Open Angle Glaucoma
JUTH	=	Jos University Teaching Hospital
KSUBEB	=	Kwara State Universal Basic Education Board
LEAs	=	Local Education Authorities
LGAs	=	Local Government Areas
LUTH	=	Lagos University Teaching Hospital
MDG	=	Millennium Development Goal
MIM	=	Mendelian Inheritance in Man
NGOs	=	Non Governmental Organisations

NPC	=	National Population Commission
NPL	=	Nil Perception of Light
OD	=	Os Dextra
OS	=	OS Sinister
PL	=	Light Perception
POAG	=	Primary Open Angle Glaucoma
PSR	=	Proliferative Sickle cell Retinopathy
SPSS	=	Statistical Package for Social Scientist
WHO/ PBL	=	World Health Organisation/Prevention of Blindness
UB	=	Unilateral Blindness
UTH	=	University of Ilorin Teaching Hospital
UK	=	United Kingdom
UVI	=	Unilateral Visual Impairment
VA	=	Visual Acuity
VAD	=	Vitamin A Deficiency

## SUMMARY

This was a cross sectional study carried out over a 7-month period from July 2005 to January 2006 in 10 randomly selected day primary schools within Ilorin metropolis to determine the pupils' ocular health status. A multistage random sampling technique was used to select 1393 school pupils. A proforma was used to obtain the pupils' parents consent and some relevant information on pupils' eye health. Ocular examinations including visual acuity, colour vision tests and funduscopy among other basic eye tests, using Illiterate 'E' chart, pen torch, Ishiara colour plates and ophthalmoscope were performed on each pupil. Additional tests such as Hirschberg test and tonometry (using Perkins tonometer) were performed on pupils as indicated. Subsequently pupils were treated, counseled and referred where necessary.

Out of a total of 1393 pupils surveyed, 689 were males and 704 were females giving a male to female ratio of nearly 1:1. The age range was between 4 and 15 years. The mean and modal ages were  $10.16 \pm 2.5$  and 10 respectively. Two hundred and seventy seven pupils had ocular pathology giving a prevalence of 19.9%. The two most common ocular disorders found among the pupils were refractive errors and vernal conjunctivitis with prevalence of 6.9% and 6.7% respectively. Others included genetic / congenital / developmental ocular disorders 39 (2.8%), glaucoma / glaucoma suspect 20 (1.4%), ocular infections 18 (1.3%), and ocular trauma 11 (0.8%). The avoidable causes of visual impairment and blindness among pupils constituted 86.7%.

The common eye complaints among the pupils included ocular pain (26%), itching (24.7%), redness (21.1%), eye discharge (8.5%), inability to see well (8.2%), photophobia (7.3%) and lacrimation (4%).

Parents of most pupils had positive attitude towards eye health in children however; some parents' negative attitude need to be changed as this can negatively affect pupils' eye health. Families of most (61.6%) pupils would go to the hospital for treatment of their eye condition, 21.3% would not seek any treatment, 9.3% practiced self-medication by applying drug(s) bought from medicine stores, and 7.8% used traditional medication. Majority (87.9%) of the parents were aware of the availability of eye care specialists in Ilorin while 12.1% of the parents were unaware of them. The views of the parents about good eyesight (normal vision) included: very important (89.4%), important (7.9%), not important (1.8%), and not very important (0.9%).

The observed general apathy of parents in bringing identified pupils with ocular pathologies for management in the teaching hospital is a source of concern and should be of research interest. The sheer magnitude of avoidable causes of visual impairment and blindness found among the pupils underscores the importance of study such as this and the need to have an effective school eye health programme in Kwara State.