



Visual Impairment Management and Associated Socio-demographic Factors among School Children in Delta State, Nigeria

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ABSTRACT

Background: Visual impairment (VI) is a major public health concern that can have a significant negative impact on a child's education and quality of life due to inability to perform normal daily tasks such as reading, writing and recreation.

Objective: The aim of this study was to identify the sociodemographic characteristics linked to the visual impairment in school children in Delta State, Nigeria.

Methods: A total of 201 participants in a descriptive cross-sectional survey, ranging in age from 6 to 19, were chosen at random from primary and secondary schools in each of Delta State's three senatorial districts. A thorough eye examination and a standardized questionnaire were used to assess the participants. SPSS version 28.0 was used to analyse the data, which were then displayed in frequency tables. $P < 0.05$ was considered statistically significant, and all reported p-values were two-tailed.

Results: Among the participants, 118 individuals (58.7%) were female. The prevalence of visual impairment (VI) in this study was 28.9% of which 69.0%, 22.4% and 8.6% had mild, moderate, and severe VI, respectively. VI was higher in females (16.9%) than in males (11.9%), and lower in primary school age group (8%) than the secondary school age group (20.9%). Socioeconomic characteristics, including parents' income, work status, and educational attainment, as well as gender and age group, did not substantially correlate with visual impairment ($P > 0.05$).

Conclusion: The study found that children of parents with low educational status and unemployment were more likely to be blind or visually impaired, even though there was no significant correlation found between sociodemographic characteristics and visual impairment. Initiation of regular school eye screening program by governmental and non-governmental organizations is recommended for early detection, diagnosis, and management of visual impairment among school children.

Key words: Socioeconomic Characteristics, Visual Impairment, Behavioural Change Wheel, Blindness, Spectacles

1: INTRODUCTION

1.1: Background

There is a significant public health burden associated with visual impairment (VI), particularly in youngsters, (Kulkarni et al. 2022). It has a significant negative impact on a child's education and quality of life, since over 80% of learning occurs through vision (Da Silva et al. 2023). Visual impairment has been associated with unfavourable conditions, such as barriers in performing daily life activities and in social participation (Brunes and Heir 2022). When pathophysiological conditions affect one or both eyes, certain parts of the visual system may not operate as well as they should, resulting in visual impairment (VI) (Direess et al. 2021). The prevalence of visual impairment has grown rapidly over time and varies among nations. It is mostly influenced by a nation's socioeconomic development and ability to provide healthcare (World Health Organization, 1999). At least 2.2 billion people are thought to be blind or visually impaired worldwide, of which at least 1 billion have vision impairments that could have been avoided or are still untreated (Bourne et al. 2017). Global epidemiological statistics revealed that 239 million children have low vision, 1.4 million suffer from eye ailments like corneal and retinal problems, and two million are classified as blind because their refractive defect has not been corrected (World Health Organization 1999; Da Silva et al. 2023). The burden of vision impairment is not spread equally around the world (Moyegbone et al., 2023). According to estimates, the prevalence of poor distance vision is four times higher in low- and middle-income areas than it is in high-income areas (Bourne et al., 2017; Moyegbone et al., 2020). Up to 90% of those with low vision reside in developing nations, where the population is larger. In children around the world, uncorrected refractive error was the most common cause of vision impairment, followed by amblyopia, corneal diseases, and retinal problems (World Health Organizaon, 2012). In industrialized nations like the UK and the USA, however, neurological or cerebral issues impacting the visual system due to ischemic, developmental, or unexplained insults continued to be the most common cause of childhood SVI/BL (Rahi and Cable 2003; Kong et al. 2012). The most frequent causes of VI and blindness in children in Nigeria were uncorrected refractive errors, cataracts, congenital ocular abnormalities, corneal scarring from trauma or traditional eye therapies, cerebral visual impairments, and retinopathy of prematurity (Eze et al. 2024).

1.2: Statement of the Problem

The majority of factors that lead to impaired vision and blindness are treatable or avoidable (Moyegbone et al., 2020). However, refractive errors, conjunctivitis, corneal scarring and injuries were still the most common eye conditions affecting Nigerian children (Onyekwe et al., 1998; Onakpoya and Adeoye 2009; Resnikoff et al., 2017). For a child who is born blind or who becomes blind the total number of years of disability are greater than for a person who becomes blind later in life (Omolase et al. 2008; Olowoyeye et al. 2018). Childhood blindness is a public health problem. If left untreated, it hampers study, growth and overall development of the child. Such children instead of supporting the family and nation in future become a burden for both (Das et al., 2021).

1.3: Study Objectives

This study intended to identify the sociodemographic characteristics associated with visual impairment management among school children in Delta State, Nigeria, with the goal of leveraging the preventable and/or treatable nature of childhood blindness. The specific objectives include

1. Prevalence and categories of VI among school children in Delta State
2. Socioeconomic characteristics associated with VI among school children in Delta State
3. Behavioural change wheel associated with VI among school children in Delta State

2: MATERIALS AND METHODS

2.1: Ethical clearance and study performance site

This study was performed as part of PhD research work at the Department of Public and Community Health, Novena University, Ogume, Delta State, Nigeria. Ethics approval was obtained from Central Hospital in Warri and Eku Government Hospital in Eku, Delta State, Nigeria. The Ethics Committees of Central Hospital in Warri, with protocol number CHW/ECC VOL 1/243, authorized 16 August 2021, and Eku Government Hospital in Eku, with reference number EBGH/AD/112/REM/V/101, authorized 13 September 2021—approved this study. The Local Education Authority (LEA) and the Chief Inspector of Education (CIE), respectively, granted permission for entry to the primary and secondary schools located within the several Local Government Authorities. The parents or guardians of the respondents provided written informed consent, and each responding child's assent was also requested.

2.2: Research design

This was a descriptive cross-sectional study, using multi-stage random sampling methods. Data were collected using both self-administered questionnaires and comprehensive eye examination. Statistical tools used included Chi-square and Fisher's exact test.

2.3: Study participants and data collection

In the three senatorial districts of Delta State, Nigeria, school children between the ages of six and nineteen years participated in this descriptive cross-sectional survey. A sample was taken from primary and secondary schools in each of Delta State's three senatorial districts. For this study, 201 respondents were used, and the number was approximated using the following formula (Charan and Biswas 2013);

$$n = \frac{Z^2 P(1-P)}{e^2}$$

The prevalence of VI in school children 32.1% from a previous study in Nigeria was used (Ekpenyong et al. 2017). Margin of error of 7%, confidence interval of 95% and non-response rate of 15% was considered to arrive at a sample size of 201.

Primary and secondary school age children in Delta State were randomly enumerated for the study in each of the three senatorial districts (Delta South, Delta Central and Delta North). One local government was random sampled from each of the three senatorial districts making a total of three (3) local government areas for the survey. Thereafter, one public primary school and one public secondary school was selected randomly from each of the three local government areas making a total of three (3) public secondary schools and three (3) public primary schools in the three senatorial districts of Delta State. Then, 33 respondents of primary school age (6-12 years) and secondary school age (13-19 years) were enumerated for the study.

All of the children who were enumerated had their mothers or guardians fill out a questionnaire, which was used to gather data. The study participants were interviewed using closed-ended, pre-tested, and pre-designed questionnaires to gather data on their individual characteristics, such as age and sex, as well as sociodemographic details, such as their parents' work status and educational attainment. After gathering the sociodemographic information, each child who was enumerated had a thorough clinical eye examination performed by a qualified Optometrist to determine their visual status.

Visual acuity assessment was the criteria used to determine visual impairment in the better eye. Visual acuity (VA) is a straightforward, non-invasive way to assess the visual system's capacity to distinguish between two areas of high contrast in space. A vision chart placed at a set distance of six meters, or twenty feet, is typically used to measure distant visual acuity (Moyegbone et

al., 2023). The vision chart's smallest line read is expressed as a fraction, with the distance at which the chart is seen serving as the numerator and the distance at which a "healthy" eye can read that line as the denominator. For example, a visual acuity of 6/18 indicates that the letter a person with visual impairment can see at six (6) meters away from the vision chart, a person with normal vision would be able to see that same letter at 18 meters away from the vision chart. "Normal" vision is 6/6 or 20/20.

Depending on the respondent's literacy level, present visual acuity (PVA) was measured monocularly using the Snellen's chart, illiterate E, or image chart for each eye. This was set up in an open area six meters (20 feet) away during the day. The visual acuity for that eye was indicated by the final completed line on the chart. Pen torch and ophthalmoscope were used to examine the external and internal integrity of the eyes, respectively. Trial lens set, retinoscope, distance snellen letter, picture, and illiterate E charts were used to measure the visual acuity as well as determine the refractive status of each selected participant.

Visual impairment was defined as a visual acuity of <6/18 (Bourne et al. 2017; WHO 2019) and classified as follow;

- *Normal/near normal VA*: presenting vision $\geq 6/12$ in the better eye.
- *Mild visual impairment (Mild VI)*: presenting VA <6/12 to 6/18 in the better eye.
- *Moderate visual impairment (Mod VI)*: presenting VA of <6/18 to 6/60 in the better eye.
- *Severe visual impairment (SVI)*: presenting VA of <6/60 to 3/60 in the better eye.
- *Blindness*: presenting VA of <3/60 in the better eye.

2.4: Statistical analysis

Pie charts and frequency tables were utilized to exhibit the data after they had been examined utilizing SPSS version 28.0. Cross tabulation, the Chi square test, and Fisher's exact test were used to determine the sociodemographic characteristics linked to vision impairment. All reported p-values were two-tailed and $P < 0.05$ was considered statistically significant.

3: RESULTS

3.1: Overview

Table 1: Socio-demographic characteristics of the respondents

Variable	Options	Frequency (n = 201)	Percent (%)
Gender	Male	83	41.3
	Female	118	58.7
	Primary School age (6-12 Years)	72	35.8

School Age Group*	Secondary School age (13-19 Years)	129	64.2
Parent Educational Status	No Schooling	11	5.5
	Primary Schooling	29	19.9
	Secondary Schooling	87	43.3
	Tertiary Schooling	72	35.8
Employment Status of Parent	Unemployed	16	8.0
	Employed	29	14.4
	Self Employed	139	69.2
	No Response	17	8.4
Income Per Month of Parent	< 30,000	81	40.3
	30,000 - 50,000	72	35.8
	51,000 - 100,000	26	12.9
	> 100,000	20	10.0
	No Response	2	1.0

*Mean age $\pm$ standard deviation = 12.30 $\pm$ 3.14 years

With a mean age of 12.30 $\pm$ 3.14 years, over one-third of the respondents in Table 1 were male and about two-third were female. Of the total, about two-third were of secondary school age (13–19 years), and about one-third were of primary school age (6–12 years). The majority of the respondents' parents self-employed, with secondary school level of education. Most responders' parents had monthly incomes of less than ₦ 30, 000.

3.2: Results for specific objective 1

The prevalence of VI was 28.9% (Table 2), of which the majority more than two-third of the responders had mild VI, follow by moderate VI. Severe visual impairment was the least occur ocular defect category.

Table 2: Prevalence and Categories of Visual Impairment among Respondents

Variable	Options	Frequency (n = 201)	Percent
Visual Status	Normal Vision	143	71.1
	Visually Impaired	58	28.9
Visual Impairment Category	Mild (< 6/12 - 6/18)	40	69.0
	Moderate (< 6/18 - 6/60)	13	22.4
	Severe (< 6/60 - 3/60)	5	8.6

3.3: Results for specific objective 2

Table 3 shows that males had lower prevalence of visual impairments than females. The statistical analysis revealed that there was no significant correlation ($\chi^2 = 0.022$, $df = 1$, $P = 1.000$) between gender and visual impairment. Meanwhile, less than one-tenth of primary school age and over two-tenth of secondary school age were visually impaired. The statistical significance of the link between age group and visual impairment was not established ($\chi^2 = 2.079$, $df = 1$, $P = 0.192$). In terms of the parents' educational status, responders whose parents had secondary and tertiary schooling, respectively, had higher visual impairments compared to those whose parents had 'no formal' and primary schooling. The statistical analysis revealed that there was no significant correlation between the parent's educational status and visual impairment ($\chi^2 = 7.528$, $df = 4$, $P = 0.090$).

Table 3: Sociodemographic Characteristics by Visual Impairment among Respondents

Variable	Options	Visual Impairment		P-Value* ($P < 0.05$)
		Yes n = 58 (%)	No n = 143 (%)	
Gender	Male	24 (11.9)	59 (29.4)	1.000
	Female	34 (16.9)	84 (41.8)	
School Age Group*	Primary School age	16 (8.0)	56 (27.9)	0.192
	Secondary School age	42 (20.9)	87 (43.3)	
Parent Educational Status	No Formal Schooling	2 (1.0)	9 (4.5)	0.090 ⁺
	Primary Schooling	6 (3.0)	23 (11.4)	
	Secondary Schooling	20 (10.0)	66 (32.8)	
	Tertiary Schooling	30 (14.9)	43 (21.4)	
Employment Status of Parent	Unemployed	6 (3.0)	10 (5.0)	0.497
	Employed	8 (4.0)	21 (10.4)	
	Self Employed	37 (18.4)	102 (50.7)	
	No Response	7 (3.5)	10 (5.0)	
Income Per Month of Parent	< 30,000	22 (10.9)	59 (29.4)	0.194 ⁺
	30,000 - 50,000	17 (8.5)	55 (27.4)	
	51,000 - 100,000	10 (5.0)	16 (8.0)	
	> 100,000	9 (4.5)	11 (5.5)	
	No Response	0	2 (1.0)	

*Chi-square test, ⁺Fisher's exact test

The majority of the respondents whose parents were self-employed had the highest prevalence of visual impairments. However, the employment status of parents did not exhibit a statistically significant correlation with visual impairment ($\chi^2 = 2.455$, $df = 3$, $P = 0.497$). Also, respondents

whose parents' income per month were less than ₦30, 000, and between ₦ 30,000 - ₦ 50,000 respectively, had the highest prevalence of visual impairment. There was no statistically significant correlation found between parents' monthly income and visual impairment ($\chi^2=5.806$, $df=4$, $P=0.194$).

3.4: Results for specific objective 3

Table 4 shows over one-tenth (13.5%) of respondents who did not complain of poor vision were visually impaired. The statistical significance of the relationship between visual impairment and complaints of poor vision was established ($\chi^2=30.792$, $df=1$, $P=0.001$). Prior to this research, just 7.0% (14) of respondents had a prescription for glasses.

Table 4: Behavioural Change Wheel by Visual Impairment among Respondents

Variables	Options	Visual Impairment		P-Value* ($P<0.05$)
		Yes n = 58 (%)	No n= 143 (%)	
Does your Child complain of Poor Vision?	Yes	31 (15.4)	22 (10.9)	< 0.001
	No	27 (13.5)	121 (60.2)	
Were Glasses Prescribed to your child?	Yes	14 (7.0)	12 (6.0)	0.005
	No	44 (21.9)	131 (65.2)	
Did you Purchased Glasses for vision correction?	Yes	7 (3.5)	6 (3.0)	1.000
	No	7 (3.5)	6 (3.0)	
	No Response	44 (21.9)	131 (65.2)	
Reason Glasses were not purchase	Don't want to wear glasses	1 (0.5)	5 (2.5)	0.135 ⁺
	Couldn't afford the glasses	5 (2.5)	2 (1.0)	
	Distance Barrier	1 (0.5)	1 (0.5)	
	No Response	51 (25.4)	135 (67.2)	
Night Blindness Complaint	Yes	4 (2.0)	9 (4.5)	1.000 ⁺
	No	54 (26.9)	133 (66.2)	
	No Response	0 (0.0)	1 (0.5)	
Duration of Night Blindness	≤ 1 year ago	3 (1.5)	5 (2.5)	1.000 ⁺
	2 - 3 years ago	1 (0.5)	4 (2.0)	
	No Response	54 (26.9)	134 (66.7)	

*Chi-square test, ⁺Fisher's exact test

A statistically significant correlation was found between the prescription of glasses and visual impairment ($\chi^2=9.085$, $df=1$, $P=0.005$). The statistical analysis revealed that there was no significant correlation between the respondents' visual impairment and their purchase of

glasses for vision correction ($\chi^2 = 0.000$, $df = 1$, $P = 1.000$), their reason for not purchasing glasses ($\chi^2 = 3.863$, $df = 2$, $P = 0.135$), their complaint of night blindness ($\chi^2 = 0.534$, $df = 2$, $P = 1.000$), or their duration of night blindness ($\chi^2 = 0.442$, $df = 1$, $P = 1.000$).

4: DISCUSSION

4.1: Overview

The burden of visual impairment is not distributed uniformly throughout the world. The prevalence of distance vision impairment in low- and middle-income regions is estimated to be four times higher than in high-income regions (Bourne et al. 2017). Out of the 1.4 million blind children globally, about 300,000 live in Africa (Gilbert and Foster 2001). Studies have shown that one in 1000 children become blind in every 5 minutes (Moyegbone et al., 2023). The most common causes of visual impairment in children worldwide was uncorrected refractive error followed by amblyopia, corneal diseases and retinal disorders (World Health Organization 2012; Asferaw et al., 2017). Studies in Nigeria have indicated that refractive errors, conjunctivitis, corneal scarring and injuries were some of the most common eye conditions affecting Nigerian children (Onyekwe et al., 1998; Onakpoya and Adeoye 2009).

4.2: On the first specific research objective

The prevalence of visual impairment (VI) in this study was 28.9%. This is similar to the study conducted in India with a prevalence of VI of 26.68% (Vashist et al. 2022). The prevalence of VI in this study was higher than the prevalence of 6.7% in Ogun State, Nigeria (Alabi et al. 2018); 7.3% and 21.5% in different studies in Cross Rivers State (Ekpenyong et al. 2017, 2020); 7.0% in Ethiopia (Anley et al. 2022); 3.6% in Northern Ireland (Dnoghuel et al., 2010); 7.7% in China (Ferede et al. 2020); and 6.4% in Australia (Pai et al. 2011). This higher prevalence of VI in this study is probably due to lack of intervention program to mitigate visual impairment among school children in Delta State. However, the prevalence of VI in this study was lower than the prevalence of 29.4% in Egypt (Yamamah et al. 2015), and 37.58% in North-East Ethiopia (Seid et al. 2022).

Of the 58 children with visual impairment, 69.0% had mild VI, 22.4% had moderate VI and 8.6% had severe VI. The result of this study is in consonance with findings of Alabi et al. among school children in Southwest Nigeria which used similar population age, sampling techniques and classification criteria as that of our study. Their results showed that 70.1% of the children had mild visual impairment, 21.8% had moderate visual impairment and 8.0% had severe visual impairment (Alabi et al. 2018). On the contrary, the results of this study was

higher than the finding of Eze et al. among Nigerian children in which the prevalence of visual impairment was 3.9%, 2.7% and 0.3% for mild, moderate and severe visual impairments, respectively (Eze et al. 2024). The study done by Eze et al. (2024) was a systematic review, hence, it may not reflect the actual value of visual impairment. The results of our study was also higher than the prevalence of mild and moderate visual impairments of 1.1%, and 0.53%, respectively in Ethiopia (Darge et al. 2017). These differences may be due to variation in research settings and study design.

4.3: On the second objective

In this study, the prevalence of VI was higher in females (16.9%) than in males (11.9%). The gender difference in prevalence of visual impairment may be due to influence of estrogen on cornea thickness during the early development stages of growth (Gong et al. 2015) as well as environmental factors. Culturally, in low- and middle income countries like Nigeria, girls cook using solid fuels such as biomass, coal and firewood that exposes the eyes to smoke and other vision damaging pollutants, while their counterpart boys are playing outside in clean air environment (Patel et al. 2022). Similar studies conducted in Saudi Arabia showed prevalence of 7.7% in male and 8.6% in female (Aldebasi 2014). In Lagos, Nigeria, prevalence of 44% in male and 56% in female was reported, with higher prevalence of VI in females than in males (Faderin & Ajaiyeoba, 2001). Conversely, in North West Ethiopia, males were found to have a higher prevalence of VI than females (4.2 and 3.8%, respectively) (Zelalem et al. 2019). In this study, the association between visual impairment and gender was not statistically significant. Other studies (Datta et al., 2009; Megbelayin & Asana, 2013; Alrasheed et al., 2016; Moyegbone et al., 2020; Woldeamanuel et al., 2020) found no significant association between gender and visual impairment.

The VI prevalence in the primary school age group in this study was 8.0%, which was lower than the secondary school age group's 20.9% prevalence. In this study, the relationship between age group and visual impairment was not statistically significant ($p = 0.192$). Several studies have demonstrated that a higher level of education raises the likelihood of visual impairment, particularly myopia, which is consistent with this finding (Woldeamanuel et al. 2020; Sapkota et al. 2008; Paudel et al. 2014). Higher school grade levels are associated with a higher prevalence of vision impairment, which could be explained by more hours spent indoors and at near work (Atowa et al., 2016). Engaging in intense indoor or near activities can cause retinal defocus, which then causes axial length elongation and visual impairment, especially myopia (Atowa et al., 2016; Myrowitz, 2012). Additionally, other researchers revealed that the

prevalence of vision impairment rises with increasing age due to more visual demands to accomplish educational, domestic and social tasks (Livingston et al., 1997; Goh et al. 2005; Alrasheed et al., 2016; Woldeamanuel et al. 2020).

In terms of the parents' educational status, responders whose parents had either secondary or tertiary schooling had higher visual impairments (i.e 10.0% and 14.9% respectively), compared to those whose parents had either 'no formal' or primary schooling (i.e 1.0% and 3.0% respectively). Moreover, the majority of the respondents whose parents were self-employed had the highest prevalence (18.4%) of visual impairments. Contrary to the findings of Zelalem et al., (2019) and Kyari et al. (2009), where the likelihood of being blind or visually impaired was higher in those with low levels of education and unemployment, the results of study showed that prevalence of VI was higher among children whose parents had higher level of education and have some level of income from self-employment. It may be inferred that despite the higher educational level of the parents', their business pursuits and demand associated with the day-day running prevented them from spending enough time and care for their children's eyesight problems.

The prevalence of VI was 8.5% among respondents whose parents made between ₦30, 000 and ₦50, 000 per month, and 10.9% in those whose parents made less than ₦30, 000. Despite the fact that this study's relationship between parents' monthly income and visual impairment was not statistically significant, it may be said that higher prevalence of VI is perhaps, related to lower family income. The study done by Woldeamanuel et al., (2020) reported a substantial correlation between visual impairment and poor household income. According to a study in Andhra Pradesh, their finding suggests that a decrease in monthly income is associated with a higher risk of visual impairment, including blindness (Dandona and Dandona 2001). Furthermore, Jaggernath et al., (2014) reported that low-income individuals bear a disproportionate burden of visual impairment. Additionally, low-income students spend more time studying in crowded, poorly lit spaces, which might have an impact on their refractive error status and ocular growth (Saad and El Bayoumy 2007). Poor people have trouble finding work and encounter many obstacles while trying to get eye health care (Jaggernath et al. 2014). The bulk of people will escape poverty if the government can provide jobs for unemployed and small-scale self-employed people. The improvement of living standards will encourage individuals to assume financial responsibility for their own and their family members' eye care.

4.4: On the third and last objective

Finding showed that 7.0% of respondents with visual impairment had prescribed spectacles while 21.9% were yet to be prescribed glasses, possibly they had not gone for eye check-up. A statistically significant correlation was found between the response to whether or not of glasses were prescribed and visual impairment ($P = 0.005$).

In this study, despite the good response that glasses were prescribed for refractive errors correction, the behavioural change will to purchase glasses for their correction was very poor. Finding showed that half (3.5%) of respondents whom glasses were previously prescribed did not purchase their glasses for vision correction, perhaps due to poverty. Similar study carried in China shows that significant proportion of rural Chinese children who need spectacles do not 'own' them (Congdon et al. 2008). Additionally, finding shows that less than one third of children needing glasses 'own' the glasses and even fewer wear glasses, which may be influenced by peer pressure, discomfort with prescription, and dislike of frame shape and sizes (Li et al. 2010; Guan et al. 2018).

Majority (25.4%) had no reason for not purchasing glasses, while 2.5% of the respondents remarked that unaffordability was their main reason. The statistical analysis revealed that there was no significant correlation between the respondents' visual impairment and their purchase of spectacles for vision correction ($P = 1.000$), as well as their reason for not purchasing spectacles ($P = 0.135$). Study done by Asare and Marjaria reported similar scenario (Asare and Morjaria 2021). The main reason why spectacles were not purchased was lack of money. Research had shown that spectacles ownership is significantly influenced by a family's level of income/wealth, educational status and geographical location (Zhao et al. 2020). Spectacles ownership rates were higher among students residing in urban areas, as well as among students with better-educated parents (Eccles 2005; Sutherland and Yao 2011). Parental mind-sets against children wearing spectacles is another significant factor that affect acquisition of spectacles to correct vision problems.

According to studies on teachers, parents, and students' attitudes toward wearing prescription glasses, the main excuses given for not wearing glasses were "inconvenience," "too busy with work to make children comply with glasses wear," and "belief that children or young people should not have eye problems" (Ebeigbe et al., 2013). Others use glasses only when essential or on rare occasions because they think they weaken and damage the eyes (Sheetal 2011; Ebeigbe et al 2013). In order to inform parents, children, and teachers about the value of wearing prescription glasses and to detect, diagnose, and treat refractive errors and other eye disorders in school-age children at an early age, governmental and non-governmental

organizations should support and/or sponsor free prescription glasses and health promotion/health education programs for primary and secondary school students in Delta State.

5: CONCLUSION AND RECOMMENDATIONS

Visual impairment is of significant public health burden among school children in Delta State that requires speedy and consistent public health measures to mitigate upsurge of treatable or avoidable blindness. It is worthy of note that children with poor vision experience poor academic performance. Poverty is an obstacles to parents and hinders them seeking eye health care and purchase of spectacle for their children with poor vision. If the government provides jobs for the many unemployed and small-scale self-employed people, the bulk of people especially those in poor resource settings will escape poverty, improve their own standards of living, as well as assume financial responsibility for their own and their family members' eye care.

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