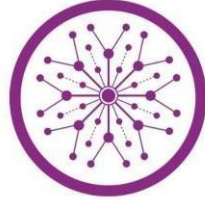


**IMPACT OF PARENTAL PERCEPTION ON PEDIATRIC VISION CARE
IN RURAL AND URBAN AREAS OF DISTRICT RAHIM YAR KHAN**



SUPERIOR UNIVERSITY

Thesis Submitted to

The Superior University Lahore

In Partial Fulfillment of the

Requirement for the Degree of

Master of Science in Allied Health Sciences

By

ALEEZA NAEEM

Roll No. SU91-MSAHW-S23-035

Session: 2023-2025

Faculty of Allied Health Sciences

Year 2023-2025

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MSAHW-S23-060

FAHS

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Session: 2023-2025

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No part of this thesis has been submitted anywhere else for any other degree. This thesis is submitted to the Faculty of Allied Health Sciences, The Superior University, Lahore in partial fulfillment of the requirements for the degree of Master of Science in the field of **“Allied Health Sciences”** in Faculty of Allied Health Sciences at The Superior University, Lahore.

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Dedication

To,

This thesis is dedicated to:

The sake of **Allah Almighty**, my Master and my Creator,

My messenger and great teacher, **Prophet Mohammad** (Peace Be Upon Him) who taught us

The purpose of life,

My homeland and my identity **Pakistan**, the garden of love and peace,

The great saints of Muslim Ummah who they reforming Muslims,

The **Superior University**, my second magnificent home,

My great instructor and guide **Sir Sarmad Saddique** and **Sir Ubaidullah Jan**,

My late father Muhammad Naeem though he is not with me but he will be in every Page of my achievement,

My great mother who never stop giving of herself in countless ways and stand

By me when things look bleak,

My siblings who supported me in every possible way throughout my degree,

My friends who encourage and support me,

All the people in my life who supported me in any point of my lifestyle, I dedicate this research.

ACKNOWLEDGMENT

All praise is due to **ALLAH** Almighty who has always been so kind and gracious to shower His countless blessings on entire world. I thank Him for the unseen and evident blessing, He Bestowed upon me.

The greatest among mankind, our beloved **Holy prophet Mohammad (PBUH)**, has been and Will always be a source of inspiration in every good thing I do.

I extend my profound gratitude to my respected teachers **Mr Sarmad Saddique** and **Mr. Ubaidullah Jan** for providing me environment and equipment to complete my study.

I feel highly indebted to my supervisor **Sarmad Saddique** who always aims at the best for His students. I acknowledge a depth of gratitude for his kind guidance, suggestions and Criticism throughout my dissertation.

I would like to extend heartfelt thanks to my mother who never give up on me and always stand by me. I have no words to pay thanks and to express my love For her.

This dissertation would not have been possible without the encouragement and generosity of Number of people. Last but not the least I am thankful to all participants for their cooperation and for making my study possible.

Aleeza Naeem

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ABSTRACT

Objective: To Evaluate the Impact of Parental perception on pediatric vision care in rural and urban areas of District Rahim Yar Khan.

Study design: It was comparative cross sectional study

Place and Duration: The study was conducted at LRBT Eye hospital and Yousaf Eye Hospital District Rahim Yar Khan from November 2023 to July 2024.

Material and Methods: The study involved 400 participants aged between 0-15 years after assessing the patient's visual acuity. Data was Collected By using non probable sampling technique. The sample was Divided into two groups. Each group consist on 200 children's from rural areas and 200 children's from Urban areas who undergo eye Examination and their over all eye health was checked.

Results: Slit lamp examination of eye structures such as Lids, Conjunctiva, Cornea, Lens, Funds, Retina and Macula. All of the 400 participants from both groups' urban and rural areas were undergone from detailed examination of all the structures. Out of 400 participants had slit lamp findings of Lids were Inflammation, Redness and Lesions were 3.8%, 1.3%, 0.5% and 94.5% normal respectively. Conjunctiva findings were Conjunctivitis, Foreign Body 7.3%, 1%, 0.5% meanwhile 91.8% had normal conjunctiva. Cornea findings were Opacity, Inflammation of cornea, Neovascularization and .3%, .8% and 98.8% had normal cornea respectively. All the 400 participants had normal lens physiology, there were no media opacity had seen in lens. Funds examination showed Hemorrhages only in (N=1), Blood vessel abnormalities (N=1) meanwhile (N=388) had normal funds examination .3%, 0.3% and 99.8% respectively. Out of 400 participants only one participant had Degeneration of retina and on other hand only one

participant had Macular dystrophy at Macula.

Conclusion: This study highlights the significant impact of parental perception on pediatric vision care in rural and urban areas of District Rahim Yar Khan. The findings reveal that parental awareness, attitudes, and beliefs about children's eye health influence their seeking behavior for vision care services. Notably, rural-urban disparities exist, with rural parents showing poorer awareness and attitudes towards pediatric vision care.

Key words: Visual Perception, Congenital, Urban, Rural, Conjunctivitis

CHAPTER 1

INTRODUCTION

Vision plays a necessary role in development of excellent motor skills, visual perception and academic success of the children (1). Screening the vision of children in childhood is recommended so that the signs of any disorder or disease such as strabismus, amblyopia and refractive error can be detected early. These disorders affect the visual development of the child. It is necessary to treat reduced vision as early as possible (2).

Knowledge and awareness among people about the common eye disorders can help them take early eye care. Major factor identified for delaying the early eye care is poor health literacy among people (3). There are other so many factors that cause effect on child's eye health. The main of them is availability and quality of eye health care services and centers. Also, public have no knowledge about the early signs and symptoms of the eye defects. There are some barriers in rural areas which include less transportation, limited finances, health care centers are far away from there areas or no eye care center in their area. For the reduction of visual impairment it is necessary to early detect the childhood eye effects in the house and at the lower levels (4).

It has been stated that Globally 19 million children are either visually Impaired or blind. Refractive errors are the main cause of the visual impairment in approximately 12 million children although refractive errors are prevented and treated by glasses (5).

A clear blueprint of what need to be addressed at primary care levels are given by WHO' ten key activities for healthy eyes in children. Both prevention and active management of the disorders and diseases in children are addressed in it (6).

Congenital, traumatic and childhood Cataract is the most commonest cause of

childhood which is treatable. It is responsible for 10-30% of blindness. The treatment is high quality surgery but the awareness of the parents so that they understand the problem of the children and agree for the surgery is also necessary (7). Eye care programs in which children targeted are too different from the programs in which adults are included as the main decision maker in case of children with eye problems is often not the subject with the problem. The decision maker is not subject with the reason as the child can not express their feeling and discomfort (8). The major health concern all over the world is visual impairment. Non availability, Non accessibility and non affordability of eye care services or the three major concern of the visual impairment. There is less knowledge of the exact effect of an eye disease and less knowledge of whom to concern to manage the eye diseases are the obstacles to use the available eye care services (9).

Early detection and treatment of the eye conditions can control vision loss. Long term complications can cause impairment. Impairment in sight may delay early development and social sequel of the child. Screening recommendations in childhoods various phases are directed to the medical professionals to identify the various disorders (10). In rural areas, children live there face many obstacles to gain health care services than the children of urban areas. Preventive care in urban areas are more than that of rural areas (11).

The prevalence of blindness which is avoided among children <15 years of age is 0.08% and the 125,388 is the estimated number of the children who are blind in Pakistan. This issue is need to be solved by improving awareness and interventions (12).

Parents are the first and main primary care givers so it is necessary for the parents to know about the eye care of the children the burden of disease is lessened. The parents who don't have good awareness of common eye diseases is one of the main challenges in the fight against childhood blindness (1). Seeking health counseling may depend on parents' awareness of potential visual abnormalities in their children as well as their receipt of the test results for children who failed the visual screening. In particular, parents are essential in helping their children who may not receive treatment for visual issues by seeking out eye care services. Research on parents' awareness of pediatric eye care has been conducted all around the world. Parents in Nigeria were found to have incorrect views regarding the origin of eye diseases, and parents in India were seen to lack an adequate understanding of eye diseases and

their symptoms. It has been observed that Saudi Arabian parents know very little about amblyopia, refractive error, and eye care (13).

Pediatric eye care is a vital component of children's overall health and development, as untreated vision problems can lead to significant long-term consequences, including impaired cognitive development, educational difficulties, and reduced quality of life. Despite the importance of pediatric eye care, numerous barriers hinder timely detection and treatment, with parental perception emerging as a critical factor. (14)

Parents play a pivotal role in recognizing early signs of eye problems, adhering to treatment recommendations, and promoting eye-healthy habits. However, their attitudes, beliefs, and knowledge about eye health can significantly influence their child's access to necessary care. Research suggests that parental perception can either facilitate or hinder pediatric eye care, highlighting the need for a comprehensive understanding of this complex relationship.(15)

The World Health Organization (WHO) estimates that 19 million children worldwide suffer from visual impairment, with 70% of cases being preventable or treatable. In addition, studies have shown that parental factors, such as education level, socioeconomic status, and cultural background, significantly impact pediatric eye care outcomes. Nevertheless, the specific mechanisms by which parental perception influences pediatric eye care remain poorly understood. (16)

Childhood blindness suppression is proportional to a child's life. By the year 2020, it was estimated that preventable child's blindness could have cost society more than \$110 billion. On the other side, 60% of children who lose their vision in the middle and low income countries die within a year of going blind, primarily due to measles, meningitis, rubella, head injuries, genetic disorders, or even prematurity. Eighteen years later, in 2020 it was projected that countries from Sub Saharan Africa would suffer from blindness with GDP loss of 0.5% (17).

The economic growth and rates of mortality of children below five are huge factors determining childhood blindness. All over the globe, the children blind is 1.26 million out of 19 million children adjusted. The aforementioned children reside in countries with mid and low income. There are few records available for the causes of childhood blindness and its prevalence (LMIC). While extrapolation model estimates suggest a significantly higher figure based on the mortality ratio of children below five (18)(19)(20).

A range of factors influence physical and overall child's eye health which includes the skills and adequacy of personnel responsible for basic eye health as well as the cost and place of eye care services(21).

Parental perception and attitude toward eye care play a crucial role in shaping children's eye health and well-being. When parents are aware of the importance of eye care, they are more likely to encourage healthy habits, such as regular eye check-ups, proper nutrition, and the use of protective eyewear. Positive attitudes can lead to early detection of vision problems, reducing the risk of long-term eye issues. On the other hand, lack of awareness or negative perceptions can delay treatment, affecting a child's vision development. Thus, parents' understanding and approach directly impact the prevention and management of eye-related conditions in children.

Vision is the key leading sense for learning and information input. It is fair to claim that most of a child's early learning derives from vision. (22)

As a result, these children who are blind suffer from severe cognitive, physical and social developmental problems due to the lack of sensory development. If adequate rehabilitation is not provided during the formative years of childhood, this can result in emotional and social withdrawal and behavioral problems as well. (23)

Wherein the aim is to emphasize the importance of intervention at this early age, there is now evidence such programs put into place yield what is referred to as 'real' results. (24)

There exists a higher number of children who lose VI (visual impairment) and so, this clearly point out the fact that there is greater need for such EI (early intervention) services. Still, there are few such programs and centers. Even where such programs exist, their effectiveness is so poorly defined that it is difficult to judge the adequacy of the programs if they do exist. Thus, surveys alone cannot reveal the adequacy or benefits posited by such program. (25)

When compared to their urban counterparts, rural inhabitants often face health-related disparities, including worse health, riskier behaviors, and restricted access to resources. Compared to small rural, suburban, and urban counties, large rural counties have been found to have higher prevalence of indicators of poor mental health among adults. These markers include considerable mental illness in men, recent significant psychological discomfort in women, and major depressive episodes in both men and women. The majority of research on the mental health of kids in rural and urban settings shows that the prevalence of mental illnesses is

similar in both (26).

Remote communities' and its subgroups' cultural values, stigma, and other social acceptability difficulties can also affect behavioral health services in remote regions. Behavioral health therapy in rural locations may be stigmatized and not confidential, which could lead to underutilization of therapies and delays in seeking care (27)

In particular, among all racial/ethnic groups combined, parent reports of the effects of MBDDs on the family (i.e., economically, socially, and psychologically) and having public health insurance were positively associated with specialty mental health use; black youths in rural areas are half as likely as white youths to use specialized mental health treatment. (28).

Accessibility concerns, including insufficient awareness of behavioral health requirements and treatment alternatives, inadequate funding, restricted mobility, and social isolation, can potentially impede access to behavioral health services for youth in rural regions (28,29). Among parents of children with exceptional health care requirements (inclusive of MBDDs), those living in rural regions are more likely to report unmet health care needs caused by transportation and financial issues than those in urban areas (30). Recruiting and keeping specialist behavioral health providers might be problematic because of these barriers (31).

Vision plays a fundamental role in an infant's cognitive, social, and emotional development. The early years of life are a critical period for visual system development, during which the foundation for lifelong vision health is established. Conditions such as amblyopia, refractive errors, congenital cataracts, and retinopathy of prematurity, if not addressed promptly, can result in lifelong visual impairments. Despite the significant impact of early visual health, infant eye care is often neglected or underestimated. Parental perception and attitudes towards eye care are pivotal in ensuring the timely identification and treatment of potential visual problems in infants. (32)

The first few years of life are critical for the development of the visual cortex and the establishment of binocular vision. Research indicates that most visual development occurs by the age of three years, with early interventions being highly effective in preventing and mitigating visual impairments. For example, amblyopia (lazy eye) is best treated in early childhood when the visual system is most malleable. Early detection and treatment of conditions such as congenital cataracts can prevent irreversible blindness and ensure normal visual development. (33)

Infant eye care also has broader implications for a child's development. Vision impairments can delay motor skills, speech, and cognitive development. Additionally, untreated visual issues may result in challenges in learning and social interactions as the child grows. The role of early eye care extends beyond medical benefits, contributing to the child's overall quality of life and well-being. (34)

Parents are the primary caregivers and decision-makers in an infant's life, making their perception and attitude towards eye care crucial. Studies have shown that parental awareness and beliefs about eye health significantly influence whether children receive timely and appropriate eye care services. Positive parental attitudes are often linked to higher rates of eye examinations, adherence to medical advice, and prompt treatment of identified issues. (35)

However, several barriers can influence parental perception and attitude. A lack of knowledge about infant visual development and potential eye problems is a common challenge. Many parents are unaware of the recommended age for a child's first eye examination or the signs that may indicate an eye problem. Misconceptions, such as believing that children cannot have serious eye issues, further contribute to delayed or neglected care. (36)

Cultural beliefs and socioeconomic factors also play a role in shaping parental attitudes. In some communities, traditional beliefs may prevent parents from seeking medical attention for their child's eye health. Financial constraints, limited access to pediatric eye care services, and lack of awareness about available resources can exacerbate the issue. Understanding these factors is essential for designing effective interventions to improve parental engagement in infant eye care. (37)

One of the most significant factors influencing parental attitudes is their level of knowledge about eye health. Parents who are aware of normal visual milestones and potential warning signs are more likely to seek timely care. For instance, understanding that infants should achieve consistent eye contact by 6 weeks of age and follow moving objects by 3 months can help parents identify potential delays in visual development. Educational campaigns that target these knowledge gaps are essential for improving outcomes. (38)

Cultural beliefs significantly influence health-seeking behaviors, including eye care. In some cultures, visual impairments may be perceived as a minor issue or attributed to superstitions. Parents may delay seeking care due to reliance on traditional remedies or fear of stigma. Addressing cultural barriers requires culturally sensitive

education and engagement strategies that respect traditional beliefs while promoting evidence-based care. (39)

Socioeconomic factors such as income, education level, and access to healthcare services also affect parental attitudes. Families with higher incomes and education levels are more likely to prioritize preventive eye care, while those facing financial constraints may perceive eye care as a non-essential expense. Additionally, geographic disparities in access to pediatric eye care services can limit opportunities for timely diagnosis and treatment in underserved communities. (40)

Parental stress, anxiety, and mental health can influence attitudes towards eye care. Parents who experience high levels of stress or have limited support systems may struggle to prioritize their child's eye health. Addressing these psychological barriers through community support programs and accessible resources can improve engagement in infant eye care. (41)

Despite the growing awareness of the importance of early eye care, significant gaps remain in parental knowledge and practices. Many parents are unaware of the recommended guidelines for pediatric eye examinations, which typically suggest the first eye check-up should occur before the child's first birthday. Additionally, there is a lack of widespread public health initiatives focused specifically on infant eye care. (42)

Healthcare systems also face challenges in ensuring equitable access to eye care services. In many regions, pediatric ophthalmologists and optometrists are in short supply, and primary care providers may lack training in identifying early signs of visual problems. This shortage contributes to delayed diagnoses and treatment. (43)

The primary objective of this thesis is to investigate the impact of parental perception and attitude on infant eye care. Specific objectives include: Assessing the level of parental knowledge about infant visual development and common eye conditions. Identifying factors that influence parental attitudes, including cultural, socioeconomic, and psychological aspects. Evaluating barriers to accessing pediatric eye care services. Providing evidence-based recommendations for improving parental engagement in infant eye care. (43)

The findings of this study will contribute to a deeper understanding of the role parents play in safeguarding their child's visual health. By identifying gaps in knowledge and barriers to care, the research aims to inform the development of targeted educational campaigns and public health interventions. These efforts can

improve early detection and treatment rates for infant eye conditions, reducing the long-term impact of visual impairments. (44)

OBJECTIVE:

To Evaluate the Impact of Parental perception on pediatric vision care in rural and urban areas of District Rahim Yar Khan.

CHAPTER 2

LITERATURE REVIEW

A study conducted by Safa H. In 2023 found about the knowledge, attitude and practice of parents about children's eye care. The study is a cross-sectional study which included 403 parents. Most of the parents had their children undergo eye examination. In 48.9% parents a positive attitude about vision care is observed. The P-Value = 0.001 which is significant. Older adults who have child's eye history had positive attitude and better knowledge is associated with high education level. The study concluded that parents with high education level have greater knowledge, attitudes and practice about eye care (45).

A study conducted by Khan Sa. In 2023 found about the parents awareness about the eye diseases and vision care needs. This study is a cross-sectional study in which 200 parents included. Knowledge about care is good in 112 parents. Knowledge about congenital glaucoma , childhood Cataract and amblyopia is good in parents. Parents whose child have existing eye problems and high education level have good knowledge about the eye diseases. Health care authorities play a role in counseling of the parents with less knowledge of eye care (46).

A study conducted by Al Mayah E. In 2023 found assessment level of awareness about children eye diseases and routine eye screening. It was a cross-sectional

analytical study included 368 participants. Participants knowledge about nasolacrimal duct obstruction, squint and refractive errors is high. Participants knowledge about amblyopia is considered low. The attitude of Parents in wearing spectacles, undergoing surgery and screening is high. Participants with higher education, working individuals, and medical professionals had statistically significant higher knowledge scores about childhood eye diseases. The levels of awareness about common pediatric eye problems and the importance of early eye screening among parents were reported to be unsatisfactory (47).

A study conducted by Surrati Am. About parents awareness and perception of the eye disease of children. It was a cross-sectional study. Twenty parents had great knowledge regarding childhood eye problems, whereas 101 parents had good knowledge. 287 parents had strong knowledge about childhood glaucoma, cataracts in children, and amblyopia. Parents in 427 and 474 expressed a positive attitude about their children wearing glasses and having ocular surgery when necessary. Social media, doctors, and campaigns were the go-to sources for information. Individuals who were 51 years of age or older ($p = 0.022$), had significantly higher knowledge scores about childhood eye disorders than those who were of Saudi origin ($p = 0.036$), had a higher income level ($p = 0.004$), or had a kid with an eye ailment ($p = 0.001$). In summary Regarding pediatric eye illnesses, parents' levels of knowledge, practice, and attitude were inadequate (48).

A study conducted by Khattak In 2023 stated that knowledge, practice and attitude of mother about ophthalmic problems in children. 385 mothers took part in the research. Age range 47.3% was 41–50. 16.1% of people were illiterate and 29.9% had graduated. Knowledge was rated on a scale of 2.00 to 14.00, where >7 denoted extreme knowledge, > 4 but < 7 denoted some knowledge, and ≤ 4 denoted lack of knowledge. On a scale of 0 to 5, practice was rated as follows: ≥ 3 for excellent practice, >1 to ≤ 3 for mediocre practice, and ≤ 1 for awful practice. The primary excuse for not seeking out eye treatment was a lack of time and convenience. There was a strong correlation between parents' attitude and practice and their awareness of ocular disorders ($r = 0.546$, $p < 0.01$ and $r = 0.602$, $p < 0.01$). There was a strong correlation between parents' attitudes and their behaviors. The knowledge, expertise, and attitude of mothers are essential in identifying and diagnosing the early indications of eye issues (49).

A study conducted by sukati vn. In 2018 Stated about the knowledge and awareness

of Parents about the eye care of children. Outcomes Of the 173 participants, 104 (60.1%) parents said they had never had their kids get an eye exam, and 69 (31.7%) thought their kids had normal vision. Ninety-seven (53.1%) parents reported not knowing anything about eye disorders affecting children, and there was no discernible correlation ($p = 0.112$) between education level and knowledge of these conditions. Of the parents who said they took their kids for eye exams, 34 (49.3%) said their kids got eye drops, and 31 (44.9%) said their kids got prescription glasses. The study's conclusions imply that parents should be made aware of the fundamentals of pediatric eye health care as well as the significance of ensuring that their kids have routine eye exams (50).

A study conducted by Habiba U. In 2017 stated the awareness of child eye care among school teachers. The knowledge of teachers was classified as "high" (35.89%), "moderate" (49.89%), or "low" (14.22%). The range of teacher practices regarding the eye health of their students was "high" (10.16%), "moderate" (23.02%), and "low" (66.82%). The knowledge index score of instructors who had close relatives with eye disease was 4.51 points higher than the score of teachers whose relatives had no eye disease. Teachers' knowledge was significantly predicted by their age, education level, and close relatives who had eye disease ($R^2 = 0.087$, $P < 0.001$). The practices of teachers were significantly predicted by their gender and the type of school they attended ($R^2 = 0.06$, $P < 0.001$). Regarding the eye health of their students, elementary school instructors' actions and knowledge differed significantly (51).

A study conducted by Amebenomo. In 2016 stated about the parental knowledge and attitude to children's eye care services. The majority of parents—60% of fathers and 66.7% of mothers—would only take their kids to the doctor for an eye exam if they had an eye complaint or issue. The main obstacle to getting their children's eyes examined was stated to be the perception that routine eye exams are not required. Money, time, using conventional medicine, and travel time to the eye clinic are additional obstacles. More than sixty-five percent of parents would permit their kids to receive any kind of eye therapy at any age, if the doctor certifies that it is necessary. Few parents would forbid their kids from receiving eye instruction, surgery, or glasses. Professional associations and the government should implement appropriate parent education programs and measures to improve parents' attitudes regarding eye exams (52).

A study conducted by Islam FM. In 2015 stated about the factors associated with awareness, attitudes and practice regarding Common eye diseases among general population. The participants ranged in age from 30 to 89. Just 4% of participants had heard of diabetic retinopathy (DR), 7% of glaucoma, and 8% of age-related macular degeneration (AMD). Most participants had heard of cataracts, trachoma, and pterygium. Having been said, 58% of participants were unaware that eyesight loss may be prevented. Lower socioeconomic position, lack of formal education, and advancing age were all linked to decreased awareness of prevalent eye illnesses. People without any education reported knowing that eyesight loss might be prevented in lower proportions (57%) than those with at least a secondary school certificate (72%), with $p < 0.001$). In all, 51% of respondents said they were aware of at least six (67%) of the nine categories that dealt with prevalent eye illnesses (53).

A study conducted by Anuradha Naryana in 2021 in which students from 296 schools throughout the three districts were included in this cross-sectional analysis. Visual acuity testing, external eye exams, objective and subjective refraction, and direct ophthalmoscopy were all part of the school eye screening. There were 91545 children in all. It was discovered that the spherical equivalent refractive error was 4.42% and the prevalence of vision impairment was 5.67%. It was discovered that the prevalence of myopia, hyperopia, and “other refractive errors” was 3.57%, 0.03%, and 0.82%, respectively. Common eye conditions included ptosis, corneal scarring, strabismus, and anomalies connected to the retina and neuro-ophthalmology. The prevalence of ocular issues and refractive errors in the rural area was 2.32% and 2.92%, respectively. According to the study, myopia and refractive errors are substantially less common in this community than in other studies that have been published. (54)

A study Conducted by Joseph E. In 2024 find out the prevalence of refractive Error. In this cross-sectional study, vision screening was conducted in children aged 5–18 years at schools in five states using a pocket vision screener. Refractive error was measured using retinoscopy, and subjective refraction and was defined both by spherical equivalent (SE) and spherical ametropia, as myopia ≤ -0.5 diopters (D), hyperopia $\geq +1.0$ D and/or astigmatism as > 0.5 D. Data from the eye with less refractive error were used to determine prevalence. Among 2 240 804 children, the prevalence of SE myopia was 1.57% at 5–9 years, 3.13% at 10–14 years and 4.8% at 15–18 years. Hyperopia prevalence was 0.59% 0.54% and 0.39%. Refractive error,

especially myopia, is common in India. Differences in prevalence between states appear to be driven by literacy rates, suggesting that the burden of myopia may rise as literacy increases. (55)

A study conducted by BIKBOW MM. in 2024 which found about the prevalence of myopia in school children. This study was conducted in Ufa/Bashkortostan/Russia from 2019 to 2022 and included 4933 children. The parents underwent a detailed interview and the children an ophthalmological and general examination. Prevalence of any myopia (≤ -0.50 dioptres (D)), minor myopia (-0.50 D to -1.0 D), moderate myopia (-1.01 D to -5.99 D) and high myopia (≤ -6.0 D) was 2187/3737, 693/4737, 1430/4737 and 64/4737. In the children aged 17+ years, prevalence of any, minor, moderate and high myopia was 170/259, 130/259, 28/259 and 12/259. In this ethnically mixed urban school children population from Russia, prevalence of any myopia (65.6%) and high myopia (4.6%) in children aged 17+ years was higher than in adult populations in the same region and it was lower than in East Asian school children, with similar associated factors. (56)

A study conducted by Elizabeth C. In 2024 Stated the rural and urban access difference in health care. The differences of access to take care of the children in both rural and urban areas of in United States. In this study the association of the location of the residence with preventive care receipt is examined. From 2019-2020 national surveys sectional data of children's health was used with a total number of 44679 childrens. Statistic, analysis of bivariate and model of the regression was used in the study to find out the differences of care. In low income households rural disparities in prevention care of children. There is need of update existing gaps. Policymakers and program developers might not be aware of existing gaps if public health surveillance is not updated. (57)

In Ramai D's research done in 2015, he uncovered the notion that parents have about vision care for children. The study was carried out in India, Honduras and Ghana and it showed that even though 95% of the vision guardians valued the testing of children's eyes, 66% of the guardians interviewed claimed their children had never undergone any eye examination. The most common excuse provided by the guardians participants of this study were their children not having eye problems and other socio economic obstacles. Additional information was captured using a five item questions inventory on basic knowledge child eye symptoms, which demonstrated that lack of knowledge on pediatric eye problems was mostly marked

in India among the three countries. further studies reveled gaps about eye health understanding while detected knowledge barriers provide evidence that there is a deeper rooted problem that is preventing caregivers from fostering an appropriate level of eye health for their children. (58)

It was documented by Ebeigbe JA that the understanding of the guardians and their perception of eye problems is imperative. The research was done in Benin City Nigeria. Thirty-five adults, 38-54 years with a mean age of 43 (+/- 2) and thirty five were recruited of whom 26 were female and 09 were male. Also, ten eye care providers aged 30-45 years with a mean age of 40 (+/- 2) were included. Blurred vision was of major concern as it was reported by most of the parents which included children's measles eye (85.7%), cataract (48.5%), conjunctivitis (74.3%), itching and redness (34.3%), strabismus (57.1%) and short sighted sty or hordeolum (48.5%). Some of the causes suggested for poor eyesight was too much carbohydrate, reading at night and over the limit television watching. Self medication and local treatment was the common practice (94.3%) by parents for the conjunctivitis. Before forty percent of the parents visited the doctor, they reported using chloramphenicol eye drop as the common drug for any eye problems (80.0%). While parents do have some awareness of common eye diseases in children, the great majority do have some negative perception about the causes. There is an urgent need to develop effective programs geared at self medication and public education about real causes of eye problems. (59)

With regard to public perceptions on eye care, a study conducted by Spafford MM in 2023 sheds some light. The general understanding on eyes and eye care was examined with the help of a twenty-one item online survey and snowball sampling. The inclusion criteria allowed individuals that were Canadian residents aged 18 or older while excluding eye care professionals and staff. The number of respondents totaled 424, where 83.0 percent were aged 20-65 years and 69.6% were female. There were discrepancies between the perceived recommendations and behaviours for scheduling eye exams: symptom-driven and within two year intervals. 43.6% of respondents believed that an appropriate age to undergo the first eye exam is after one year. A small portion of the respondents linked glaucoma to no symptoms (6.0%) or amblyopia to blurred vision. It would be surprising if a majority of respondents could accurately identify the symptoms for what is expected from glaucoma, amblyopia, and cataract. Although most respondents believed there are no

expected outcomes from glaucoma, moderate and some expected outcomes from cataract and amblyopia was identified. The gaps and information that is misleading regarding the eyes and eye care for the Canadian respondents demonstrate profound vision threatening gaps. Which in return stresses the attention public education on the topic demands. (60)

A study Conducted by Alrasheed in 2024 stated about the noticeable barriers for assessing child eye care. This was a systematic review which was conducted by finding many online databases. Articles available between 2003 and 2023 are researched by them. The studies were conducted to check the effects of the childhood VI and to assess hurdles to accessing eye care services in African countries The leading causes of children in the Africans can be delayed by early diagnosis and a good treatment strategy. There is less availability and pocket friendly services is the main hurdle . Geographic barriers, incorrect health trust, not so good perception of parents, very less knowledge and not so good practices in parents to vision care of peads. (61)

A study Conducted by Srivastva in 2024 stated about the predilection of refractive errors among children in urban vs rural areas. It was a cross-sectional study in which A total of two thousand twenty four children's are included in this who went to the urban and rural areas schools. A chart known as Snellen chart was used to check the visual acuity for far of all the participants with and without glasses. History regarding visual complaints are also taken. The children were 10.92 ± 2.73 years old on average, with urban groups being 10.93 ± 2.73 years old and rural groups being 10.91 ± 2.73 years old. There were more females than males. 17.43% was the overall refractive error ratio. Compared to rural areas, the prevalence was higher in urban areas. Of the 886 study participants under the age of ten, 218 children with refractive error did not have any eye problems. Simple myopia was the most prevalent refractive error in both groups, while astigmatism was the least prevalent. It is necessary to increase awareness about the use of electronic devices, particularly among youngsters in urban areas. (63)

HYPOTHESIS

Alternate Hypothesis:

There is a significance association between the Impact of Parental perception on pediatric vision care in rural and urban areas.

Null Hypothesis:

There is no significance association between the Impact of Parental perception on pediatric vision care in rural and urban areas.

CHAPTER-3

METHODOLOGY

4.1 Research Design: Comparative cross-sectional study

4.2 Study Settings: LRBT Eye hospital and Yousaf Eye Hospital

4.3 Sample Size:

$$n = N / [1 + N(e)^2]$$

$$n = 517,000 / 1 + [(517,000)(0.05)^2]$$

$$n = 517,000 / 1293.5$$

$$n = 399.6907$$

$$n = 400$$

Sample Size = 400

4.4; Sampling Technique:

Non probability sampling technique

- Convenient sampling technique

4.5: Duration of Study: Duration of Study was 6 months.

4.6: Selection Criteria

4.6.1; Inclusion Criteria

Children and their parents who were willing to be part of study of both rural and urban areas were included in the study. Childs having age 0 to 15 year were included.

4.6.2 Exclusion Criteria

Children elder than 15 years were excluded. Parents having mental disability were excluded. Medical professional parents were excluded

4.7: Equipment(s)

- Snellen chart
- Autorefractometer

- Slit lamp

ETHICAL CONSIDERATIONS:

The rules and regulations set by the ethical committee of Superior University was followed while conducting the research and the rights of the research participants were respected.

- Written informed consent was taken from all the participants.
- All information and data collection was kept confidential.
- Participants were remained anonymous throughout the study.
- The subjects were informed that there are no disadvantages or risks on the procedure of the study.
- They were also informed that they were free to withdraw at any time during the process of the study.
- No risks are present in this research.
- Participants were aware about the symptoms of computer vision syndrome and the factors associated with it.
- We will do everything we have to protect your privacy. Your identity will not be shown in any publication resulting from this study.

- You participate in this research study is volunteer. You may choose not to participate and you may withdraw your consent to participate any time. You were not be penalized in any way should you decide not you participate or to withdraw from this study.

DATA COLLECTION PROCEDURE

Data was Collected on 400 sample By using non probable sampling technique. The sample was Divided into two groups. Each group consist on 200 children's from rural areas and 200 children's from Urban areas who undergo eye Examination and their over all eye health was checked. Data was Collected from LRBT Eye hospital and Yousaf Eye Hospital Rahim Yar Khan after informed Consent of the parents. A proforma were filled by Parents to know about their perception.

DATA ANALYSIS

Statistical analysis was performed with descriptive measures and suitable graphs software was used SPSS version 26 results was showed in the form of table graphs and different tests qualitative data was presented in the form of graphs. Student t Test for the comparison of the impact of parents perception of Urban and rural Areas

GANTT CHART

	April-24	May-24	June-24	July- October 24	November 24	December 24
Title approval	✓					
Synopsis Defence		✓				
Data collection				✓		
Thesis writing					✓	
Thesis submission						✓
Defence						✓

CHAPTER 4

RESULTS

The study involved 400 participants, aged 0-15 years, divided into three age groups: 01month-01 year (9.3%), 02-07 years (41.8%), and 08-15 years (49.0%). The mean age was 8 years, indicating a moderate age distribution. Gender distribution was slightly skewed towards females, with 229 female child (57.3%) and 171 child men (42.8%). Participants were classified based on urban and rural areas.

Slit lamp examination of eye structures such as Lids, Conjunctiva, Cornea, Lens, Funds, Retina and Macula. All of the participants 400 from both groups' urban and rural areas were undergone from detailed examination of all the strictures. Out of 400 participants had slit lamp findings of Lids were Inflammation (N=15), Redness (5), Lesions (N=15) and (N=378) were 3.8%, 1.3%, 0.5% and 94.5% respectively. Conjunctiva findings were Conjunctivitis (29), Foreign Body (N=4) while 367 were normal 7.3%, 1%, 0.5% and 91.8%. Cornea findings were Opacity (N=1), Inflammation of cornea (N=3), Neovascularization (N=1) meanwhile 395 participants had healthy cornea .3%, .8%, 0.3% and 98.8% respectively. All the 400 participants had normal lens physiology, there were no media opacity had seen in

lens. Funds examination showed Hemorrhages only in (N=1), Blood vessel abnormalities (N=1) meanwhile (N=388) had normal funds examination .3%, 0.3% and 99.8% respectively. Out of 400 participants only one participant had Degeneration of retina and on other hand only one participant had Macular dystrophy at Macula.

Table 1: Age of participants:

Age of participants		Frequency	Percent
	1month to 1year	37	9.3%
	2years to 7years	167	41.8%
	8years to 15years	196	49.0%
	Total	400	100.0

The study involved 400 participants. These participants were divided into two groups 200 urban and 200 were rural participants. These participants were divided into three age groups from 01month-01 year (9.3%), 02-07 years (41.8%), and 08-15 years (49.0%).

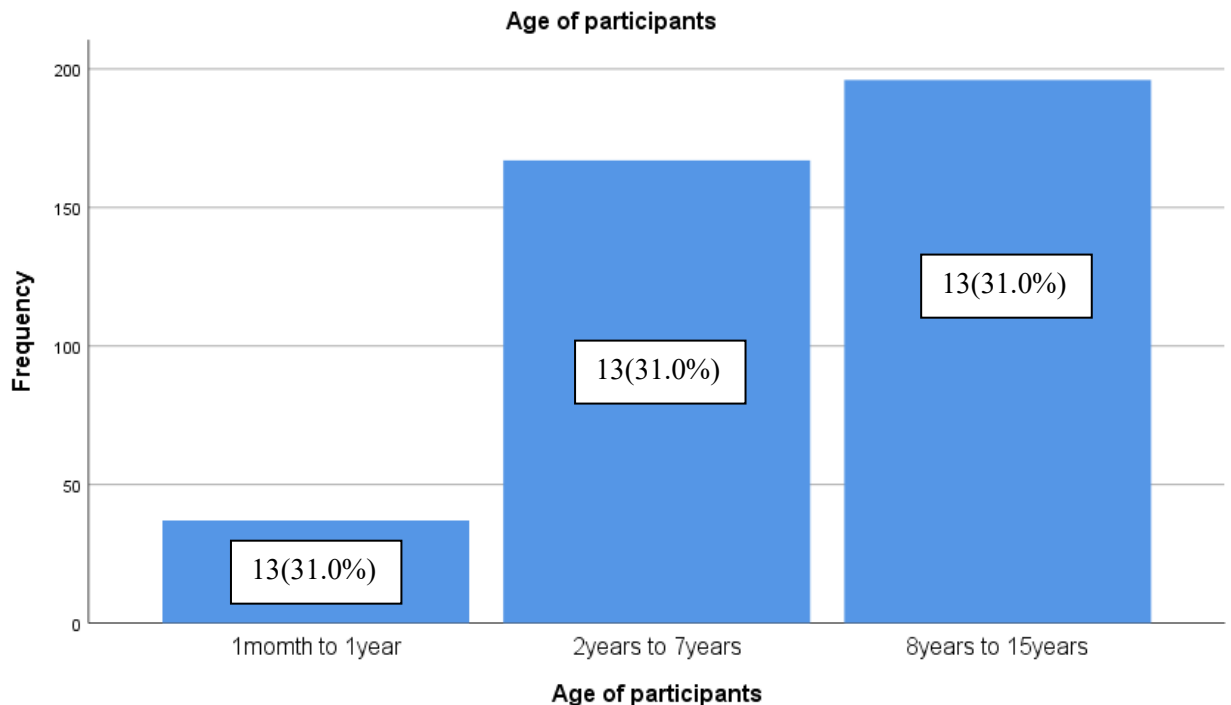


Figure 1: Age of participants

Table 2: Gender of Participants:

	Frequency	Percent
Male	171	42.8%
Female	229	57.3%
Total	64	100.0

These participants were divided by gender although the child females were slightly more than child males. Especially, 171 participants were male which was 42.8% of the sample while 229 participants were child females which was 57.3% of the total. This gender distribution is strategic in ensuring that observations the study will generate will reflect both the male and female from urban and rural areas.

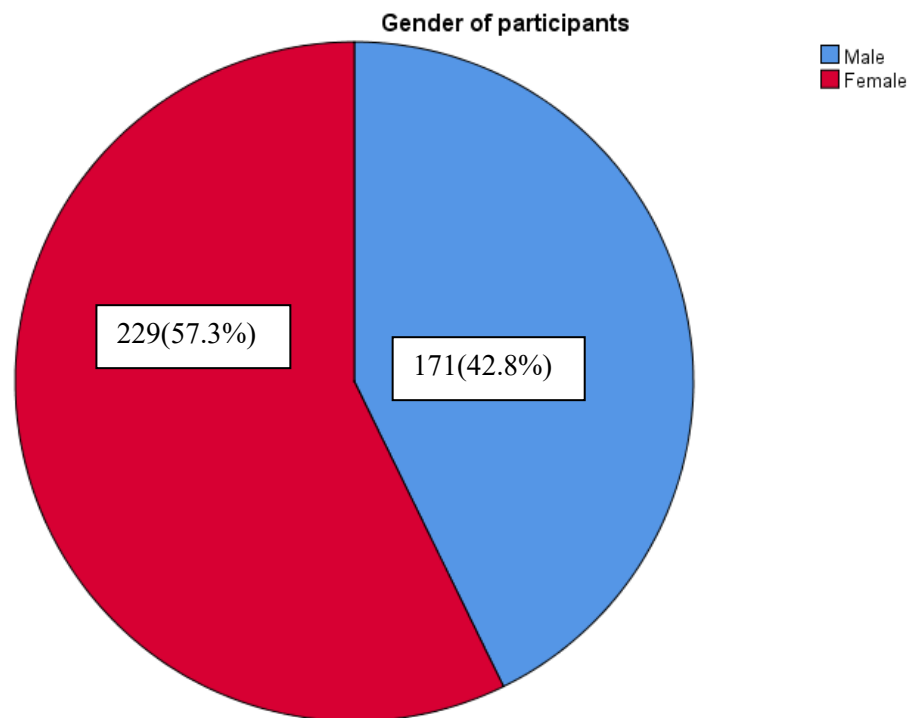


Figure 2: Gender of Participants

Table 3: Location Urban/Rural

Location Urban/Rural		Frequency	Percent
	Urban	200	50.0%

	Rural	200	50.0%
	Total	400	100.0

The study involved 400 participants. These participants were divided into two groups 200 urban and 200 were rural participants.

Table 4: Duration of last Eye examination by eye Doctor:

Location Duration of last Eye examination Cross tabulation						
		Duration of last Eye examination				Total
		Before a year	Before 3 month	Before a month	Never	
Location	Urban	54	40	39	67	200
	Rural	45	1	13	141	200
Total		54	41	39	266	400

These participants were divided into two groups 200 urban and 200 were rural participants. Duration of last Eye examination by eye Doctor from **Urban Area** Before a year were (N=54), Before 3 month (N=40), Before a month (N=39) and Never checked by a doctor (N=39). From **Rural Area** were (N=45), (1), (13) and (141) never checked by eye Doctor respectively.

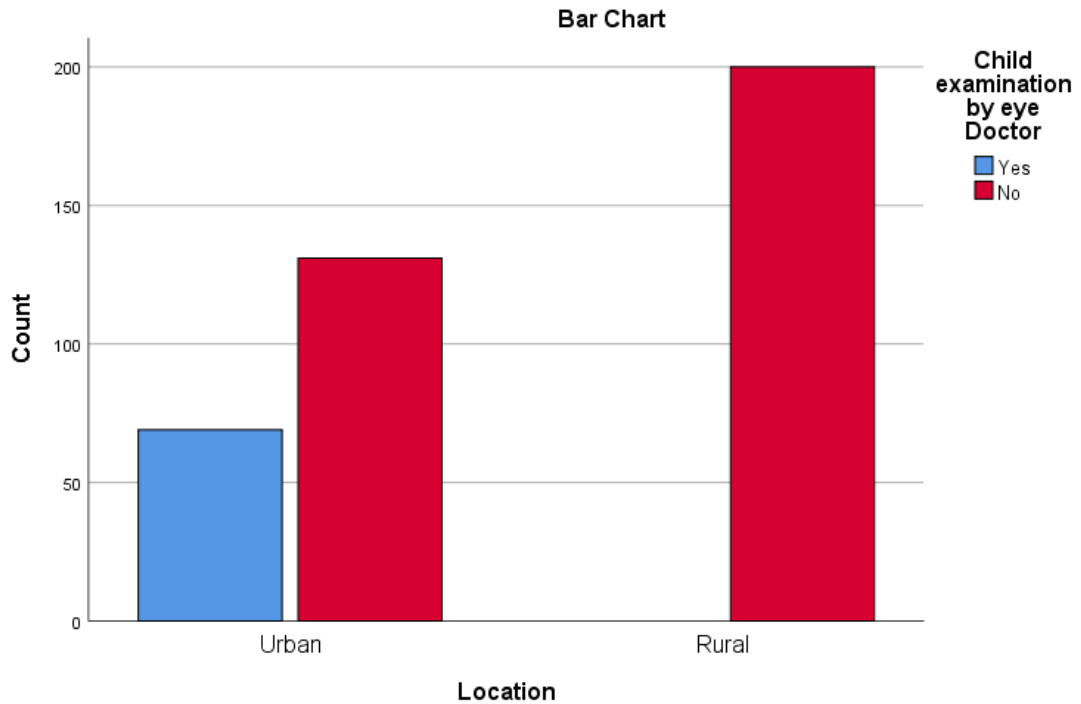


Table 5: Recommended age for a child to undergo visual examination

Location / Recommended age for a child to undergo visual examination Cross tabulation						
		Recommended age for a child to undergo visual examination				Total
		At 6-12 month	At age 3	At age 6	When there is complain	
Location	Urban	30	26	55	89	200
	Rural	6	4	6	184	200
Total		36	30	61	273	400

These participants were divided into two groups 200 urban and 200 were rural participants. Recommended age for a child to undergo visual examination from **Urban Area** At 6-12 month were (N=30), At age 3 years (N=26), At age 6 years (N=55) and When there is complain checked by a doctor (N=89). From **Rural Area** were (N=6), (4), (6) and (184) checked by eye Doctor When there is complain respectively.

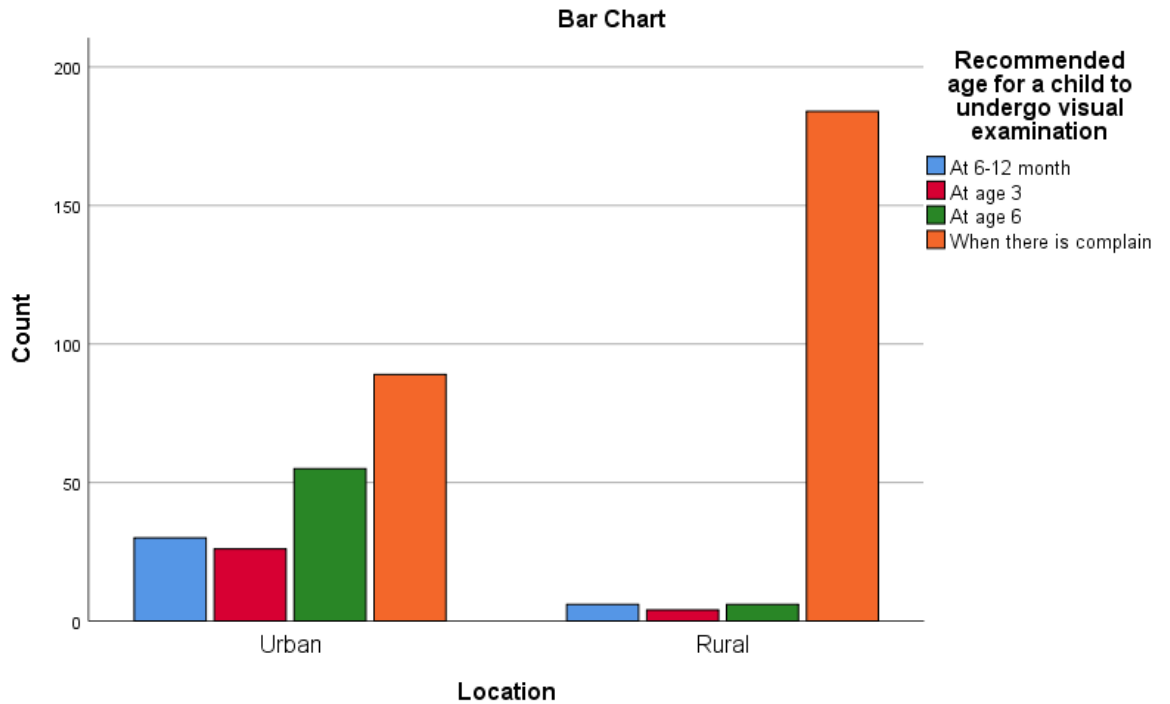


Figure 5: Recommended age for a child to undergo visual examination

Table 6: Facilities are available in Urban and Rural areas

Facilities are available in urban /rural area Cross tabulation				
		Facilities are available in urban area		Total
		Yes	No	
Location	Urban	199	01	200
	Rural	47	153	200
Total		144	256	400

These participants were divided into two groups 200 urban and 200 were rural participants. (N=199) were facilitated from urban area (N=47) from rural area were facilitated by an eye care meanwhile only (N=01) from urban and (N=153) from rural area were never checked or facilitate at rural and urban area.

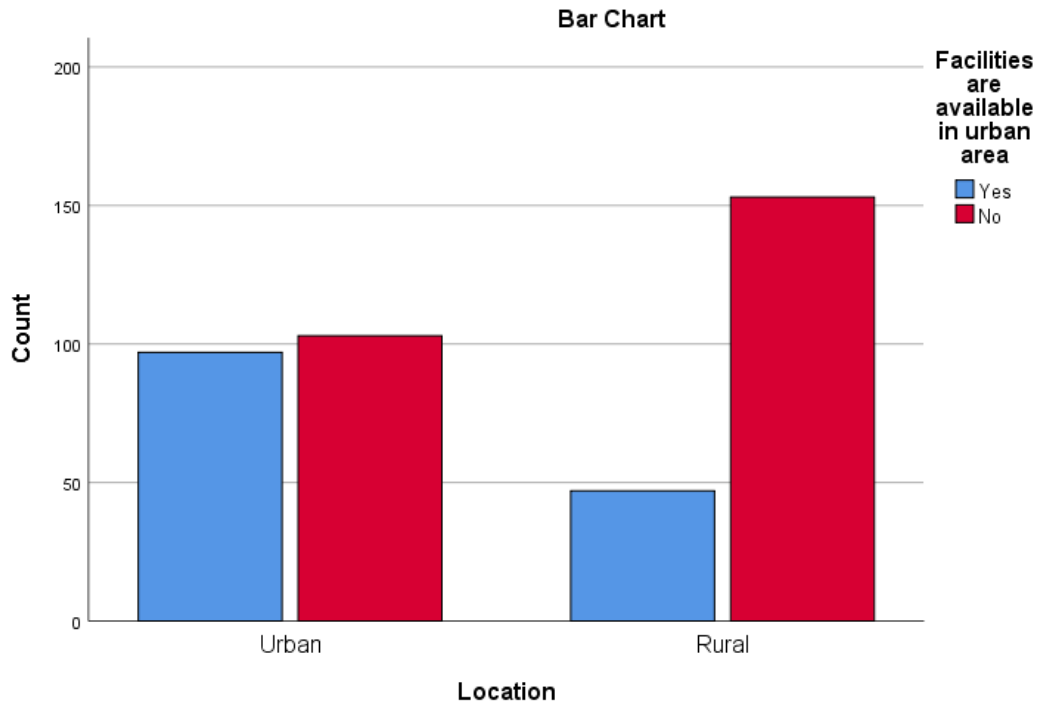


Figure 6: Facilities are available in Urban and Rural areas

Table 6: Slit lamp Examination of Eye Structures:

Examination of Lids		Frequency	Percent
	Normal	378	94.5%
	Inflammation	15	3.8%
	Redness	5	1.3%
	Lesions	2	.5%
	Total	400	100.0

Conjunctiva			
	Normal	367	91.8%
	Conjunctivitis	29	7.3%
	Foreign Body	4	1.0%
	Total	400	100.0

Cornea			
	Normal	395	98.8%
	Opacity	1	.3%
	Inflammation of cornea	3	.8%
	Neovascularization	1	.3%
	Total	400	100.0

Lens			
	Normal	400	100.0%

Funds			
	Normal	398	99.5%
	Hemorrhages	1	.3%
	Blood vessel abnormalities	1	.3%
	Total	400	100.0

Retina			
	Normal	399	99.8
	Degeneration of retina	1	.3
	Total	400	100.0

Macula			
Valid	Normal	399	99.8%
	Macular dystrophy (any)	1	.35
	Total	400	100.0

Slit lamp examination of eye structures such as Lids, Conjunctiva, Cornea, Lens, Funds, Retina and Macula. All of the participants 400 from both groups' urban and rural areas were undergone from detailed examination of all the strictures. Out of 400 participants had slit lamp findings of Lids were Inflammation (N=15), Redness (5), Lesions (N=15) and (N=378) were 3.8%, 1.3%, 0.5% and 94.5% respectively. Conjunctiva findings were Conjunctivitis (29), Foreign Body (N=4) while 367 were normal 7.3%, 1%, 0.5% and 91.8%. Cornea findings were Opacity (N=1), Inflammation of cornea (N=3), Neovascularization (N=1) meanwhile 395 participants had healthy cornea .3%, .8%, 0.3% and 98.8% respectively. All the 400 participants had normal lens physiology, there were no media opacity had seen in lens. Funds examination showed Hemorrhages only in (N=1), Blood vessel abnormalities (N=1) meanwhile (N=388) had normal funds examination .3%, 0.3% and 99.8% respectively. Out of 400 participants only one participant had Degeneration of retina and on other hand only one participant had Macular dystrophy at Macula.

Table 7: VA of OD

VA of OD / Location Cross tabulation				
		Location		Total
		Urban	Rural	
VA of OD	6/6	167	165	332
	6/9	3	11	14
	6/12	16	18	34
	6/18	5	3	8
	6/24	4	1	5
	6/36	3	1	4
	6/60	0	1	1
Total		198	200	398

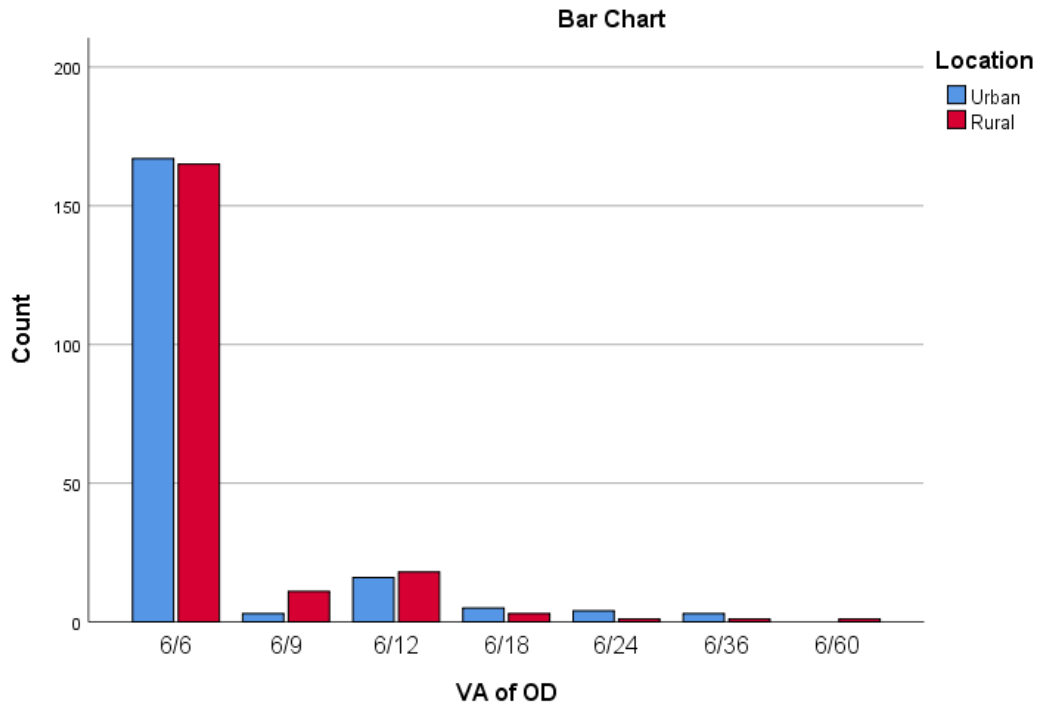


Figure 7: VA of OD

Table 8: VA of OS

VA of OS * Location Cross tabulation				
		Location		Total
		Urban	Rural	
VA of OS	6/6	169	166	335
	6/9	3	10	13
	6/12	17	17	34
	6/18	4	4	8
	6/24	3	0	3
	6/36	4	2	6
	6/60	0	1	1
Total		200	200	400

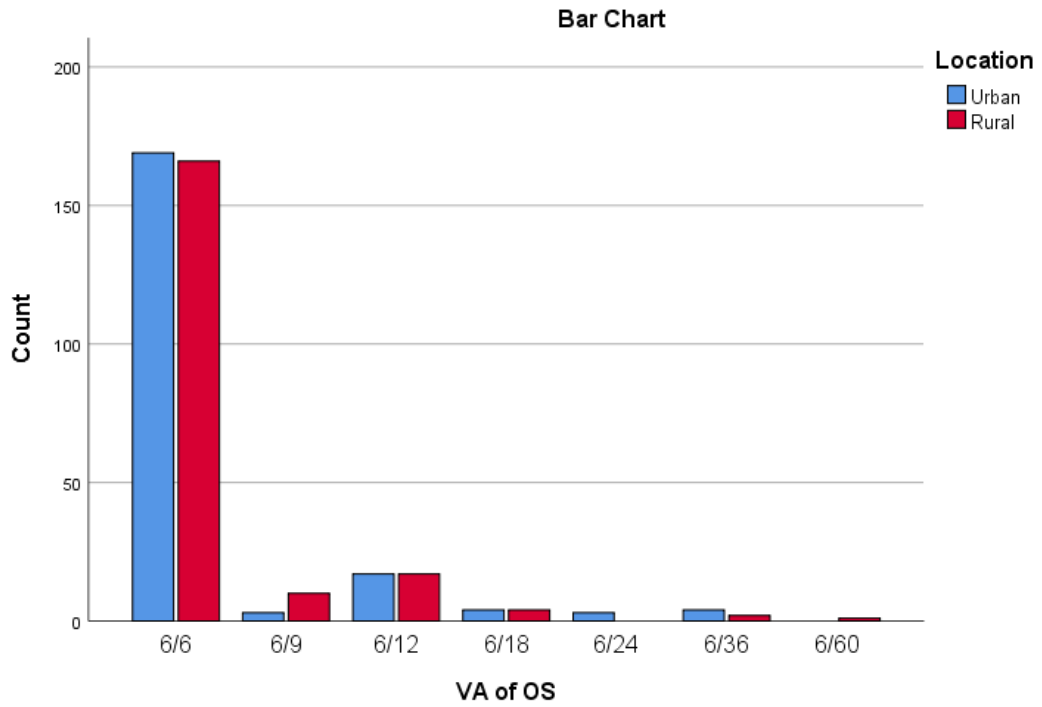


Figure 8: VA of OS

Refraction of OD / Location Cross tabulation				
		Location		Total
		Urban	Rural	
Refraction of OD	6/6	191	197	388
	-1.50x180	1	0	1
	6/9	8	2	10
	6/36	0	1	1
Total		200	200	400

Refraction of OS / Location Cross tabulation				
		Location		Total
		Urban	Rural	
Refraction of OS	6/6	191	199	390
	-1.75x80	1	0	1
	6/9	8	0	8
	6/36	0	1	1
Total		200	200	400

BCVA OD / Location Cross tabulation				
		Location		Total
		Urban	Rural	
BCVA OD	6/6	198	198	396
	6/6p	1	0	1
	6/9	1	1	2
	6/36	0	1	1
Total		200	200	400

BCVA OS / Location Cross tabulation				
Count				
		Location		Total
		Urban	Rural	
BCVA OS	6/6	198	197	395
	6/6p	1	0	1
	6/9	1	2	3
	6/36	0	1	1
Total		200	200	400

Diagnosis / Location Cross tabulation				
		Location		Total
		Urban	Rural	
Diagnosis	WNL	168	166	334
	NLD Blockage	2	0	2

	Refractive Error	30	34	64
Total		200	200	400

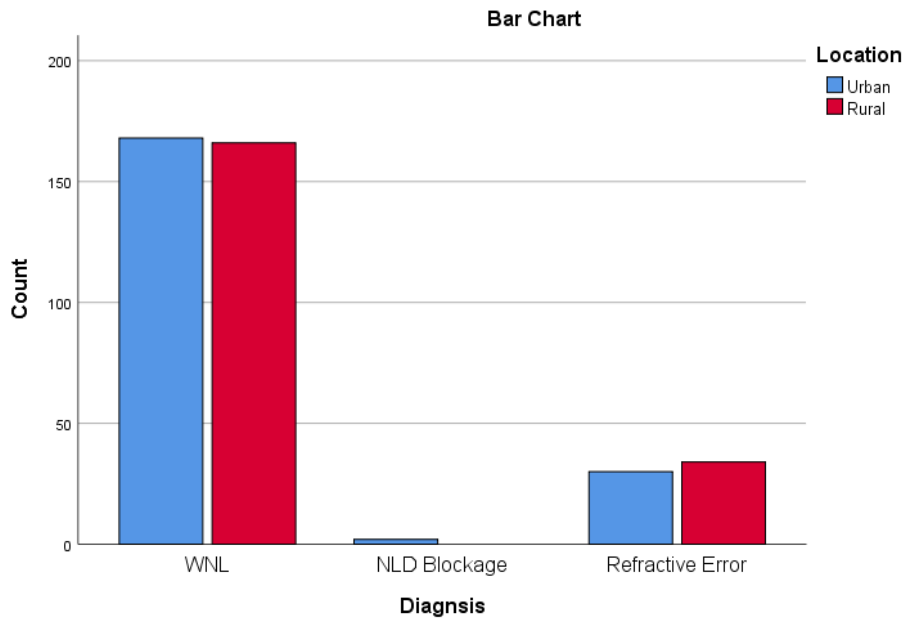


Table 9: Student t test:

One-Sample Test						
	Test Value = 0.05					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Age of participants	71.971	399	.000	2.34750	2.2834	2.4116
Gender of participants	61.474	399	.000	1.52250	1.4738	1.5712
Location	57.927	399	.000	1.45000	1.4008	1.4992
Child examination by eye Doctor	93.976	399	.000	1.77750	1.7403	1.8147
Recommended age for a child to undergo visual examination	38.194	399	.000	3.45500	3.2772	3.6328
Duration of last Eye examination	28.856	399	.000	3.34250	3.1148	3.5702
Facilities are available in urban area	66.167	399	.000	1.59000	1.5428	1.6372
Slit lamp Examination of Lids	57.708	399	.000	1.02750	.9925	1.0625
Slit lamp Examination of Conjunctiva	64.590	399	.000	1.04250	1.0108	1.0742
Slit lamp Examination of Cornea	83.520	399	.000	.97500	.9521	.9979
Slit lamp Examination of Funds	121.523	399	.000	.96000	.9445	.9755

Slit lamp Examination of Retina	191.000	399	.000	.95500	.9452	.9648
Slit lamp Examination off Macula	381.000	399	.000	.95250	.9476	.9574
VA of OD	27.161	397	.000	1.33191	1.2355	1.4283
Refraction of OD	57.903	399	.000	1.01000	.9757	1.0443
VA of OS	26.735	399	.000	1.33250	1.2345	1.4305
Refraction of OS	62.391	399	.000	1.00000	.9685	1.0315
BCVA OD	91.747	399	.000	.97000	.9492	.9908
BCVA OS	83.520	399	.000	.97500	.9521	.9979
Diagnosis	34.327	399	.000	1.28250	1.2091	1.3559

This table compares the mean age of children between the two groups: those whose parents have reported their child has been examined by an eye doctor ("Yes") and those whose parents reported the child has not been examined ± 1.77750 ("No"). The **t-value** tests whether the difference in means between these two groups is statistically significant, and the **p-value 0.05** indicates if this difference ± 3.45500 is unlikely to have occurred by chance. Compares the number of months since the child's last eye examination between two different groups, such as geographic locations or other categories. The **mean ± 3.45500** reflects the average time (in months) since the last eye examination in each group, the average number of eye examinations for children whose parents believe vision should only be checked if complaints arise ("Yes") versus those whose parents believe children should have regular eye exams regardless of complaints ("No"). The **mean ± 3.45500** represents the average number of eye exams in each group. the mean vision health scores of children in areas with eye care facilities ("Yes") versus areas without such facilities ("No"). The **mean ± 1.59000** represents the average vision health score in each group, compares the examination scores for different eye structures (lids, conjunctiva, cornea, lens, retina, macula) between two groups—children who have undergone a slit lamp examination and those who have not. The **t-value 0.05** measures whether the difference in the mean scores for these structures is significant between the two groups. The **p-value** indicates if the observed differences are statistically meaningful.

CHAPTER-VI

DISCUSSION

Refractive errors are the main cause of the visual impairment in approximately 12 million children although refractive errors are prevented and treated by glasses (5). A clear blueprint of what need to be addressed at primary care levels are given by WHO's ten key activities for healthy eyes in children. Both prevention and active management of the disorders and diseases in children are addressed in it (6).

The study by Abd Elaziz et al. and our study in Rahim Yar Khan both highlight significant issues with awareness and access to proper eye care for children, but with notable differences. In Abd Elaziz et al.'s study, parents showed high awareness of common eye conditions like nasolacrimal duct obstruction and squint, although their knowledge of amblyopia was low. Parental attitudes toward wearing spectacles, surgery, and screening were positive, and education and profession played a key role in enhancing knowledge. In contrast, our study in Rahim Yar Khan reveals that rural parents often lack awareness due to limited educational programs, relying on home remedies instead of proper medical care. The scarcity of healthcare facilities, transportation challenges, and financial constraints further hinder access to treatment. While both studies found unsatisfactory overall awareness of eye health and the importance of early screening, our study emphasizes the need for targeted interventions such as mobile health clinics, educational campaigns, and government support to improve eye care in rural areas, highlighting the stark contrast in the healthcare realities between urban and rural populations. (47).

In our study conducted in Rahim Yar Khan, Pakistan, parents exhibited low awareness of children's eye health, due to a lack of educational programs and limited access to healthcare facilities. This situation is exacerbated by financial constraints and transportation challenges, making it difficult for families to seek proper medical care. In contrast, the study by Surrati et al. in Madinah, Saudi Arabia, found that while 78.2% of parents had poor knowledge about childhood eye diseases, 76.9% had a positive attitude toward their children wearing spectacles, and 85.4% supported ophthalmic surgery when necessary. This suggests that despite the low knowledge levels, there is a willingness to engage in appropriate eye care practices. However, the overall levels of knowledge, practice, and attitude regarding pediatric eye diseases were deemed unsatisfactory, indicating a need for improved educational initiatives.

Comparing these findings, both studies highlight significant gaps in parental knowledge about children's eye health. While our study emphasizes the challenges faced in rural Pakistan, including reliance on home remedies and limited access to healthcare, the Surrati

et al. study underscores the importance of enhancing educational programs to improve both knowledge and attitudes toward pediatric eye care. This comparison underscores the necessity for targeted health promotion initiatives to enhance parental awareness and attitudes toward children's eye health in both urban and rural settings. (48).

In our study we find out Slit lamp examination of eye structures such as Lids, Conjunctiva, Cornea, Lens, Funds, Retina and Macula. All of the participants 400 from both groups' urban and rural areas were undergone from detailed examination of all the strictures. Out of 400 participants had slit lamp findings of Lids were Inflammation (N=15), Redness (5), Lesions (N=15) and (N=378) were 3.8%, 1.3%, 0.5% and 94.5% respectively. Conjunctiva findings were Conjunctivitis (29), Foreign Body (N=4) while 367 were normal 7.3%, 1%, 0.5% and 91.8%. Cornea findings were Opacity (N=1), Inflammation of cornea (N=3), Neovascularization (N=1) meanwhile 395 participants had healthy cornea .3%, .8%, 0.3% and 98.8% respectively. All the 400 participants had normal lens physiology, there were no media opacity had seen in lens. Funds examination showed Hemorrhages only in (N=1), Blood vessel abnormalities (N=1) meanwhile (N=388) had normal funds examination .3%, 0.3% and 99.8% respectively. Out of 400 participants only one participant had Degeneration of retina and on other hand only one participant had Macular dystrophy at Macula.

In our study to find that in the rural areas of Rahim Yar Khan, parents of children are often unaware of eye issues due to a lack of educational programs and awareness about eye health. As a result, they tend to rely on home remedies like using neem or eye washes, which only offer temporary relief and do not provide proper medical care. Furthermore, hospital facilities are scarce and far away, making it difficult for families to access necessary treatment. Limited transportation options and financial constraints also prevent people from seeking proper medical help. To address these challenges, it is essential to implement awareness programs, establish mobile health clinics, provide government support for subsidized healthcare, and train community health workers to promote eye care at the local level. In our study conducted in Rahim Yar Khan, Pakistan, a comprehensive slit-lamp examination of 400 participants from both urban and rural areas revealed a low prevalence of significant ocular abnormalities, with most participants exhibiting normal eye structures. In contrast, the study by Spafford et al. in Canada highlighted substantial knowledge

gaps and misconceptions about eye health among the public, underscoring the need for improved education and awareness programs. These contrasting findings suggest that while the Pakistani population in Rahim Yar Khan may have a lower prevalence of detectable eye diseases, there may still be a need for enhanced public education on eye health to address potential knowledge gaps and promote proactive eye care practices. (49) (57) as compare to our study, In our results, it was found that parents in Rahim Yar Khan lack knowledge about refractive errors, which is why vision-related problems in their children are often ignored.

In our study the Rahim Yar Khan study and the study conducted in India reveal significant gaps in caregivers' awareness of pediatric eye health, with a lack of understanding about refractive errors and vision-related issues leading to neglect of eye exams for children. In both cases, caregivers often believed their children had no eye problems, compounded by socio-economic barriers such as financial constraints and limited access to transportation or medical facilities. While the Indian study specifically used a five-question test to assess caregivers' knowledge, identifying fundamental misconceptions inhibiting their ability to recognize eye health issues, the Rahim Yar Khan study highlighted similar challenges but without a structured test. Despite these differences, both studies emphasize the need for increased awareness and education on eye health and the importance of addressing socio-economic factors to improve children's access to proper eye care. While a study conducted by Ramai D. (58)

Both Al Mayah E.'s 2023 study and the Rahim Yar Khan study highlight significant gaps in awareness about children's eye health, with Al Mayah's study noting high knowledge about conditions like nasolacrimal duct obstruction, squint, and refractive errors, while Rahim Yar Khan parents exhibited limited awareness of refractive errors and general vision issues. Both studies emphasize unsatisfactory awareness regarding the importance of early eye screening, with socio-economic barriers such as financial constraints and limited access to healthcare influencing knowledge levels. Al Mayah's study found that participants with higher education, working individuals, and medical professionals had better knowledge, while Rahim Yar Khan participants faced challenges like reliance on home remedies due to lack of knowledge and access. Despite differences in specific eye condition awareness and

treatment attitudes, both studies point to the critical need for improved education and access to eye care services to address these gaps and ensure children receive proper eye health care. To compare a study conducted by Al Mayah E. In 2023 found assessment level of awareness about children eye diseases and routine eye screening. It was a cross-sectional analytical study included 368 participants. Participants knowledge about nasolacrimal duct obstruction, squint and refractive errors is high. Participants knowledge about amblyopia is considered low. The attitude of Parents in wearing spectacles, undergoing surgery and screening is high. Participants with higher education, working individuals, and medical professionals had statistically significant higher knowledge scores about childhood eye diseases. The levels of awareness about common pediatric eye problems and the importance of early eye screening among parents were reported to be unsatisfactory (47).

CONCLUSION:

This study shows the significant impact of parental perception on pediatric vision care in rural and urban areas of District Rahim Yar Khan. The findings reveal that parental awareness, attitudes, and beliefs about children's eye health influence their seeking behavior for vision care services. Notably, rural-urban disparities exist, with rural parents showing poorer awareness and attitudes towards pediatric vision care.

The study emphasizes the need for targeted interventions to educate parents, particularly in rural areas, about the importance of pediatric vision care. Improving parental perception can lead to timely detection and treatment of vision issues, ultimately reducing the risk of long-term visual impairment in children. Healthcare providers, policymakers, and community leaders must collaborate to develop culturally sensitive and accessible vision care services for children in underserved areas.

RECOMMENDATIONS:

- Consider conducting subgroup analyses to see if certain populations (e.g., children vs. adults, or those with specific occupational demands requiring intense visual tasks) are more susceptible to headaches associated with refractive errors.

LIMITATIONS:

- Findings from specific group (e.g., children) may not be applicable to the vitality bowl population.
- Limited age group or homogeneity in the study population can reduce the generalizability of findings. Recruiting participants from diverse demographic backgrounds, including different ages, fitness levels, and ocular health statuses, can help mitigate this limitation.

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APPENDIX 1

Consent Form :

Description of the Research and Your Participation

You are invited to participate in a research study conducted by **ALEEZA NAEEM**

The purpose of this research is to evaluate the **“Impact of parental perception on Pediatric Vision Care In Rural And Urban Areas Of District Rahim Yar khan”**.

Risks and Discomforts

There was no risks associated with this research.

Potential Benefits

You was a part of an important research work.

Protection of Confidentiality

We were everything we can to protect their privacy. Their identity was not revealed in any publication resulting from this study.

Voluntary Participation

Your participation in this research study is voluntary. You may choose not to participate and you may withdraw your consent to participate any time. You will not be penalized in any way should you decide not you participate or to withdraw from this study.

CONSENT

I have read this consent form and have been given the opportunity to ask questions. I give my consent to participate in this study.

Participant’s Signature _____ Date: _____

A copy of this consent form should be given to the participant.

APPENDIX 2: URDU CONSENT FORM

تحقیق میں شرکت کا دعوت نامہ

عنوان :

“Topic title Impact of parental perception on Pediatric Vision Care In Rural And Urban Areas Of District Rahim Yar khan”.

نقصانات اور تکلیف: اس تحقیق سے کسی قسم کے نقصان یا تکلیف کا اندیشہ نہیں ہے۔

نقصانات اور تکلیف: اس تحقیق سے کسی قسم کے نقصان یا تکلیف کا اندیشہ نہیں ہے۔

ممکنہ فوائد: آپ کو ایک اہم تحقیق میں حصہ لینے کا موقعہ دیا جائے گا۔

رازداری کا تحفظ: ہم آپ کی معلومات کے تحفظ کے لیے وہ سب کچھ کریں گے جو ہم کر سکتے ہیں۔

تحقیق کے متعلق اکتھی کی گئی تمام معلومات کو انتہائی خفیہ رکھا جائے گا۔ ڈیٹا انٹری اور تجزیے کے

دوران آپ کے متعلق وہ تمام معلومات جن سے آپ کی شناخت ہو سکتی ہو کو ختم کر دیا جائے گا۔ اس

تحقیق کے نتیجے میں شائع ہونے والی کسی بھی اشاعت میں آپ کی شناخت کو ظاہر نہیں کیا جائے گا۔

رضاکارانہ شمولیت: اس تحقیقی مطالعہ میں آپ کی شرکت رضاکارانہ ہے۔ آپ کو شرکت نہ کرنے اور

کسی بھی وقت بغیر وجہ بتانے اس تحقیق میں شمولیت کو چھوڑنے کا اختیار ہے۔ شرکت نہ کرنے یا اس

میں شمولیت کو چھوڑنے کی صورت میں آپ کے خلاف کوئی کارروائی نہیں کی جائے گی

میں سمجھ گیا/گی ہوں کہ میری شرکت رضاکارانہ ہے اور یہ کہ میں کسی بھی وقت اپنا ارادہ بدل

سکتا/سکتی ہوں اور تحقیق سے دستبردار ہو سکتا/سکتی

میں سمجھ گیا/گی ہوں کہ میرے جوابات خفیہ رکھے جائیں گے۔ میں محققین کو اس بات کی اجازت

دینا/دیتی ہوں کہ وہ جوابات کو جانچ سکیں۔

میں سمجھ گیا/گی ہوں کے معلومات میرے نام کے بجائے نمبر کی صورت میں محفوظ کی جائیں گی۔ تا کہ میں نتائج کی اشاعت کے دوران کسی بھی طرح سے شناخت نہ کیا جا سکوں۔ میں اس بات سے رضامند ہوں کہ جو معلومات مجھ سے لی جائیں گی وہ تحقیق میں استعمال ہوں گی۔ میں اوپر بتائی گی تحقیق میں شامل ہونے کے لیے رضامند ہوں اور محققین کو اپنا پتہ تبدیل ہونے کی صورت میں مطلع کروں گا/گی۔

رضا مندی: میں نے یہ اجازت نامہ پڑھا ہے اور مجھے سوال پوچھنے کا موقع دیا گیا ہے۔ میں اس سٹڈی مینشورٹ کے راضی ہوں۔

شرکت کنندہ کا نام _____ دستخط _____ تاریخ _____

اجازت لینے والے کا نام _____ دستخط _____ تاریخ _____

QUESTIONNAIRE

Age of children : _____

Location:

- Urban
- Rural

1= Questions For Parents.

Have Your Child ever Examined by eye doctor?

- Yes
- No

When it is recommended for a child to undergo visual examination?

- At 6-12 month
- At age 3
- At age 6
- When there is complain

When was your child's last Eye examination?

- Before a year
- Before 3 month
- Before a month
- Never

Does Children's vision only needs to be checked if he/she complain?

- **Yes**
- **No**

Is There Any eye care facilities are available in your area?

- **Yes**
- **No**

2= Over All Eye Health of the Child

Slit lamp examination

Lid

- Normal
- Inflammation
- Redness
- Lesions

Conjunctive

- Normal
- Conjunctivitis
- Foreign body
- Sub Conjunctivitis hemorrhage

Cornea

- Normal
- Opacity
- Inflammation of Cornea
- Neovascularization
- Irregularities

Lens

- Normal
- Cloudy
- Any Opacity

Fundus

- Normal
- Hemorrhages
- Exudates
- Blood vessel abnormalities

Retina

- ✓ Normal
- ✓ Detachment of retina
- ✓ Degeneration of retina

Macula

- Normal
- Macular dystrophy (any)

3= Refractive Status of the Children

Visual Acuity

Right eye	Left eye

Refraction

Right eye	Left eye

Best Corrected Visual Acuity

Right eye	Left eye