



Perception of Eye Health in Teachers and Children's in District Mardan Pakistan

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Abstract

Aim: Perception of eye health in teachers and children and how to improve.

Method: Subjects were recruited at government schools of district Mardan Pakistan. Willing teachers & children were included in the study. Data collection was carried out by using close ended Questionnaire.

Results: More than half of the teachers have good knowledge about diseased eye like 63.68% believed that painful eye is diseased eye but mostly students have lack of knowledge about diseased eye like only 5 % believed that painful eye is not a diseased eye. Almost all students and teachers have awareness about trauma. Mostly students and teachers don't have misconception like in cause of foreign body sensation should only wash the eye with water.

Conclusion: Most of the students had less awareness about eye health. There were also certain misconceptions about eye health in teachers like bright light can't cause injury so there is need of technical and educational session about eye health in schools so our school teachers could play an important role as primary eye health care workers in community.

Keywords: Perception; Trauma; Misconceptions

Eye Health or Ocular Health

Clement Chinedu Azodo & Ejike B Ezeja Modifies the of definition of ocular health , ocular health is considered as a complete state of physical, social and mental well-being in relation to vision and not necessarily the absence of disease and infirmity [1].

Introduction

Three per cent of the world's blind population consists of children [2] and the prevalence of childhood blindness has been reported to be approximately 6.5 per 10,000 [3]. There is general lack of health care workers as health educators

in Pakistan and many other developing countries. This can be supported by the involvement of teachers in eye health education. But, there is also a lack of literature on what they themselves know about common eye diseases, and their detection and management. Schools also offer an excellent opportunity for health education about prevention of some common diseases which are major cause of blindness in eye. In management of some even common diseases are specialized and cost effective [4].

Several conditions cause vision impairment in children. Among them are uncorrected refractive errors (URE), trachoma, vitamin A deficiency disorders (VADD), cataracts and retinopathy of prematurity. Although many children

report that they can see and function better at school after receiving spectacles, the evidence of the impact of correcting refractive errors on academic performance is limited, mainly because studies to explore this are very challenging to undertake and interpret [5]. Globally, an estimated 100 million children (less than 5 years of age) have vitamin A deficiency [6], and 150 million children have active trachoma. Almost 50 % of Pakistan's total population of around 154 million is children [7], but nationally representative data on childhood eye diseases are lacking. Pakistan has been classified by the WHO as a country with severe sub-clinical vitamin A deficiency in parts or whole of the country [8], and studies conducted in different areas of Pakistan show that 32-43% children under 5 have deficient serum vitamin A levels. Trachoma is endemic in parts of the country. Ocular trauma is also a major regular event and cause of blindness especially in one eye; Schools offer an excellent opportunity for health education about prevention of trauma.

Despite the growing number of avenues for accessing health information health knowledge and information gaps continue to manifest as myths and misconceptions, especially in communities. For many people, the eye is a complex, delicate and poorly-understood organ, which only fuels such myths and misconceptions. These myths and misconceptions are often based on commonly-held beliefs, some of which have no scientific rationale and rarely bring benefit to eye health [6].

Literature Review

Following literature reviews were found regarding perception of eye health in schools:

- A study was conducted by khabir Ahmad and their fellows in schools of Abbottabad district, northern Pakistan, in 2006 and found that schoolchildren and their teachers had a good knowledge of eye health, but many of them had serious misconceptions e.g., use of kohl, medicines and eye drops keeps eyes healthy. Health education in schools must take into account children's existing knowledge of and misconceptions about various aspects of eye health. Such steps if taken could improve the relevance of eye health education to schoolchildren [7].
- Another study was conducted by Rohit Thummalapallia, and fellows and they found that apart from technical training, educational sessions may play an important role in promoting sustained teacher interest in school-based health intervention programmers and overall impact on community health. Urban schoolteachers have therefore been identified as promising candidates in the continued

effort to eliminate avoidable blindness in India and other parts of the developing world [8].

Rationale of Study

School health programs are opportunity to provide comprehensive eye health services to millions of children throughout the world. In future, this will increase, especially in low income countries, due to the effect of increasing growth rate and provision of primary and secondary education schooling. So it is very important to knowing about the perception of eye health among teachers and children and aware them about eye health. And also need to change their misconception and myths.

Aims

Perception of eye health in teachers and children and how to improve.

Objectives

- What is the perception of eye health among teacher and children?
- Provide awareness among the teachers and children.
- Try to change their misconception and myths about eye health.

Material and Methodology

Study Design

Cross sectional study and descriptive.

Setting

Study was conducted at private schools of district Mardan.

Duration of the Study

Time period was of 3 months.

Sample Size

Select sample size was of 199 subjects.

Sampling Technique

Simple random technique.

Method of Data Collection

Data was collected through specially designed performa.

Procedure

Subjects were recruited at private schools of district District. Willing teachers & children were included in the study. Data collection was carried out by using close ended Questionnaire.

Data Analysis

Data was analyzed using excel and SPSS

Result & Discussion

Total subjects were studied (199) teachers were 20 and students were 179 as below (Table 1).

| Subjects | Females | Males | Total |
|----------|---------|-------|-------|
| Teachers | 12 | 8 | 20 |
| Students | 48 | 131 | 179 |

Table 1: Subject's description.

| Diseased eye Variables | Students | | |
|--|----------|-----|-------------|
| | | | Frequency % |
| 1. Swelling of eyelid included in unhealthy eye? | Yes | 73 | 40.80% |
| | No | 106 | 59% |
| 2. Painful eye is diseased eye? | Yes | 114 | 63.68% |
| | No | 65 | 36.31% |
| 3. A difficulty in distinguishing between shades of color is diseased? | Yes | 84 | 46.60% |
| | No | 95 | 53.30% |
| 4. Red eye is normal? | Yes | 102 | 57% |
| | No | 65 | 43% |
| 5. Is it normal when one eye is smaller than other? | Yes | 110 | 61.50% |
| | No | 69 | 38.50% |
| 6. Having dirty discharge is normal? | Yes | 86 | 48.08% |
| | No | 93 | 51.95% |
| 7. Having problem in seeing in night is normal? | Yes | 81 | 45.25% |
| | No | 98 | 54.74% |
| 8. Is normal eye having watering? | Yes | 113 | 63.10% |
| | No | 66 | 36.20% |
| 9. Blurring of vision is normal? | Yes | 100 | 55.90% |
| | No | 79 | 44.13% |

Table 2: Diseased eye (student).

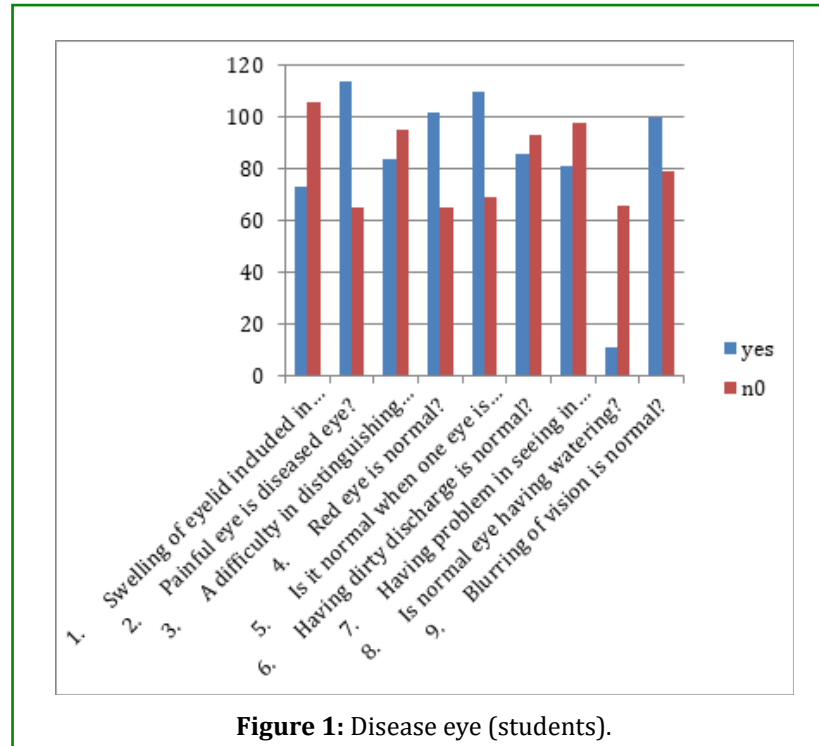


Figure 1: Disease eye (students).

| Diseased eye | Teachers | | |
|--|----------|--------|-------------|
| | Yes | No | Frequency % |
| 1. Swelling of eyelid included in unhealthy eye? | 9 | 45% | |
| | 11 | 55% | |
| 2. Painful eye is diseased eye? | 1 | 5% | |
| | 19 | 95% | |
| 3. A difficulty in distinguishing between shades of color is diseased? | 18 | 90% | |
| | 2 | 10% | |
| 4. Red eye is normal? | 2 | 10% | |
| | 18 | 90% | |
| 5. Is it normal when one eye is smaller than other? | 3 | 15% | |
| | 17 | 85% | |
| 6. Having dirty discharge is normal? | 86 | 48.08% | |
| | 93 | 51.95% | |
| 7. Having problem in seeing in night is normal? | 1 | 5% | |
| | 19 | 95% | |
| 8. Is normal eye having watering? | 1 | 5% | |
| | 19 | 95% | |
| 9. Blurring of vision is normal? | 6 | 30% | |
| | 14 | 70% | |

Table 3: Disease eye (teacher).

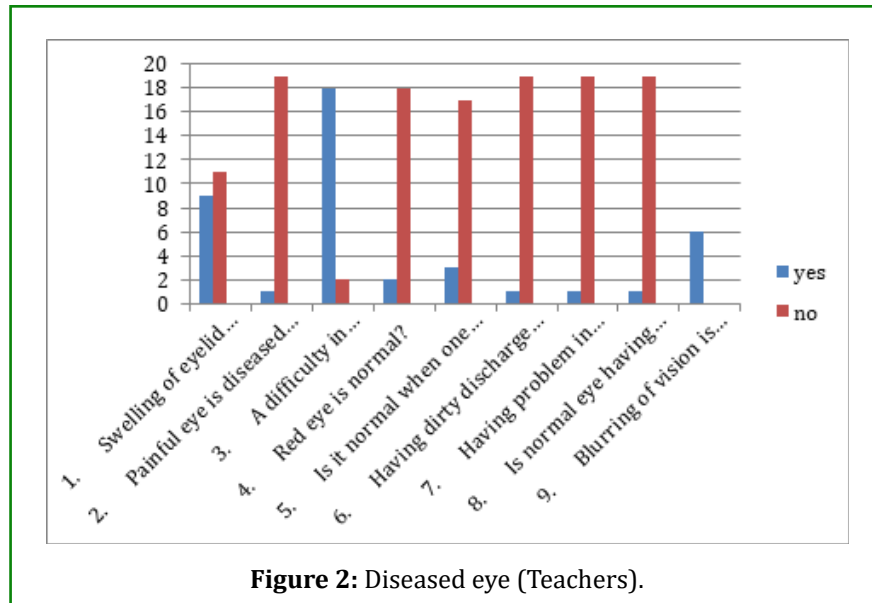


Figure 2: Diseased eye (Teachers).

| Variable | Students | | |
|---|----------|-----|-------------|
| | Yes | No | Frequency % |
| 1. Irritation in sunlight or in bright light is normal? | 100 | 79 | 55.86% |
| | 79 | 100 | 44.13% |
| 2. Is bright light can cause injury? | 153 | 26 | 85.47% |
| | 26 | 153 | 15% |
| 3. Are pointed objects like pencil can cause injury? | 160 | 19 | 89.38% |
| | 19 | 160 | 10.61% |
| 4. Chemicals can cause injury? | 162 | 17 | 90.50% |
| | 17 | 162 | 9.50% |

Table4: Trauma (Student).

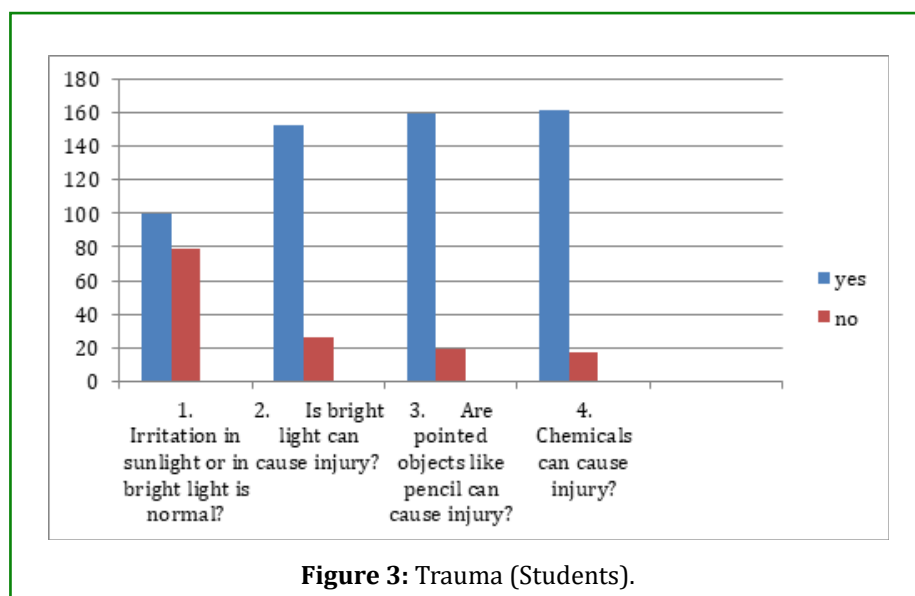


Figure 3: Trauma (Students).

| Variable | Teachers | | |
|---|----------|----|-------------|
| | | | Frequency % |
| 1. Irritation in sunlight or in bright light is normal? | Yes | 2 | 10% |
| | No | 18 | 95% |
| 2. Is bright light can cause injury? | Yes | 6 | 30% |
| | No | 14 | 70% |
| 3. Are pointed objects like pencil can cause injury? | Yes | 20 | 100% |
| | No | 0 | 0 |
| 4. Chemicals can cause injury? | Yes | 20 | 100% |
| | No | 0 | 0 |

Table 5: Trauma (students).

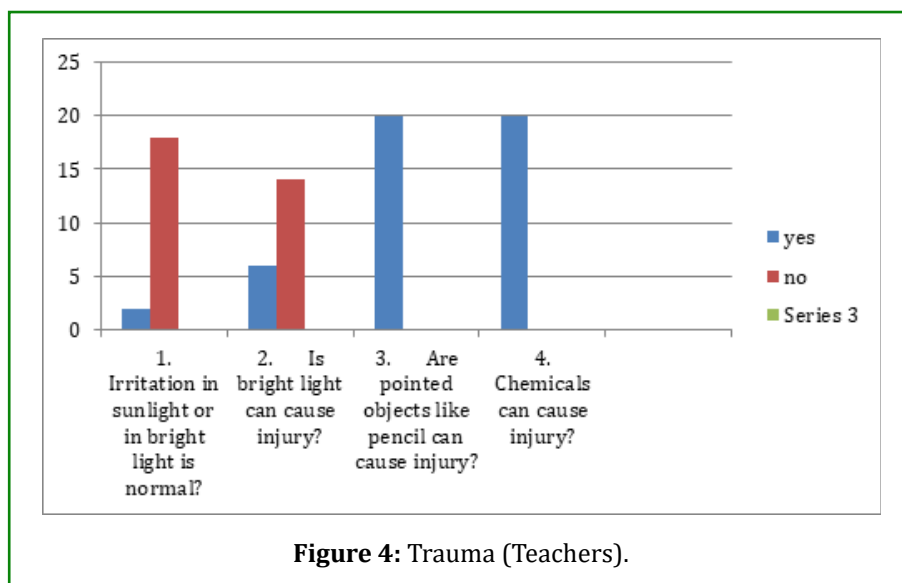


Figure 4: Trauma (Teachers).

| Variables | Students | | |
|---|-----------------|-----|-------------|
| | | | Frequency % |
| 1. Is kohl is harmful for our eyes? | Yes | 78 | 43.60% |
| | No | 101 | 56.40% |
| 2. Is normal eye should have only good vision? | Yes | 175 | 97.80% |
| | No | 4 | 2.20% |
| 3. Holding books too closer to read is normal? | Yes | 97 | 54.19% |
| | No | 82 | 45.81% |
| 4. Cleanliness is important for eye health? | Yes | 173 | 96.60% |
| | No | 6 | 3.40% |
| 5. Computer, tv and mobile phones etc can affect the vision | Yes | 175 | 97.80% |
| | No | 4 | 2.20% |
| 6. Having foreign body sensation should.... | Wash with water | 83 | 46.40% |
| | Use rose water | 71 | 39.70% |
| | Use honey | 25 | 25% |

Table 6: Misconceptions and myths (students).

| Variables | Teachers | | |
|---|-----------------|----|-------------|
| | | | Frequency % |
| 1. Is kohl is harmful for our eyes? | Yes | 15 | 75% |
| | No | 5 | 25% |
| 2. Is normal eye should have only good vision? | Yes | 9 | 42.85% |
| | No | 11 | 42.85% |
| 3. Holding books too closer to read is normal? | Yes | 6 | 30% |
| | No | 14 | 70% |
| 4. Cleanliness is important for eye health? | Yes | 19 | 95% |
| | No | 1 | 5% |
| 5. Computer, tv and mobile phones etc can affect the vision | Yes | 20 | 100% |
| | No | 0 | 0 |
| 6. Having foreign body sensation should.... | Wash with water | 19 | 95% |
| | Use rose water | 1 | 5% |
| | Use honey | | |

Table 7: Misconception and myths teacher.

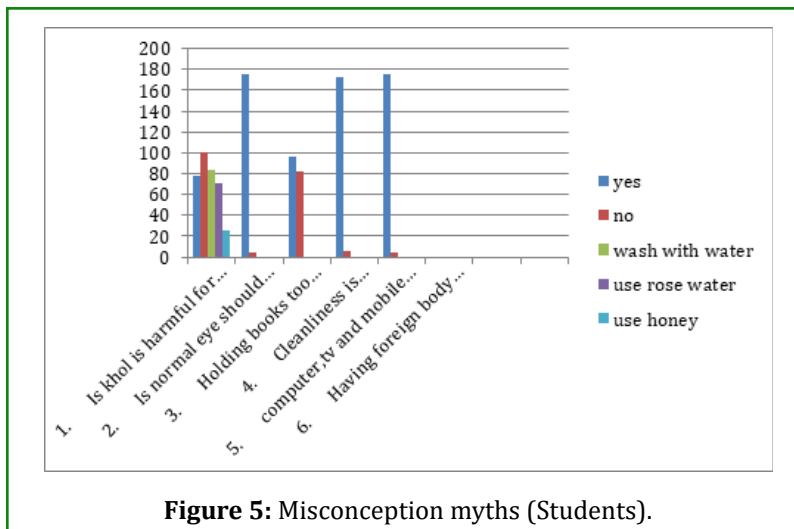


Figure 5: Misconception myths (Students).

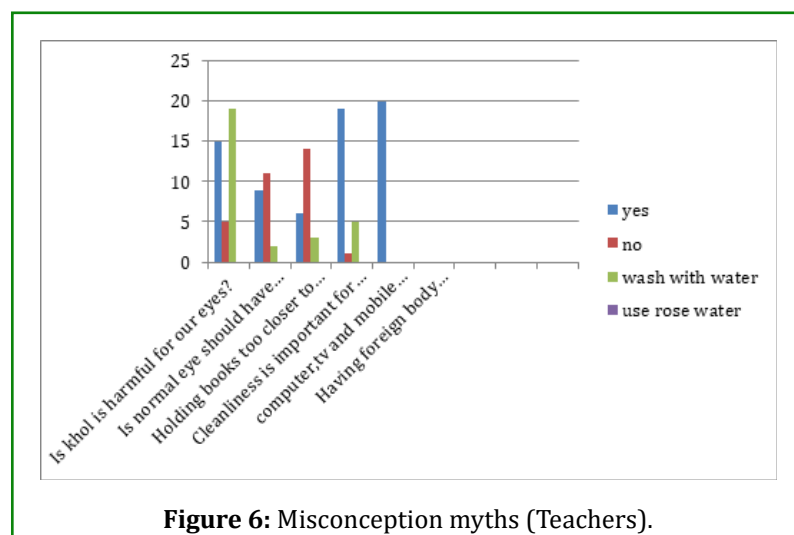


Figure 6: Misconception myths (Teachers).

Discussion

- In my study I used specialized designed questionnaire, 199(179 students & 20 teachers) subjects from different government's schools of district Mardan Pakistan from middle stander (class 6 to 8) were included. while in other study which is conducted by khabir Ahmad and fellows Used drawing and writing technique, 160 boys and girls (9-12 years old) attending four primary schools in Abbottabad district, northern Pakistan, were invited to draw pictures in response to a set of semi-structured questions and then label them one-on-one that some teachers and students have good knowledge but many had lack of knowledge.
- In my study 97.8% students and 42.85% teachers believed that healthy eye should have only good vision while 2.2% students and 52.38% perceived that other factors like diseased free eye with good vision will be considered as a healthy eye. According to 63.8% students and 5% teachers believed that painful eye is diseased eye and 36.31% students and 95% teachers believed that painful eye is not diseased eye. According to 46.6% students and 90% teachers believed that difficulty in distinguishing between shades of colors is diseased and 53.3% students and 10% teachers believed that it is normal. 57% student's and 10% teachers believed that red eye is normal 43% students 90% teachers believed that red eye is diseased eye. 61.1% students and 15% teachers believed that it is normal when one eye is smaller than other eye while 38.5% students and 85 % teachers believed that it is not normal. 48% and 48.8% teachers believed that having dirty discharge is normal while 51.9% students and 51.95% teachers believed that having dirty discharge is not normal. 45.25% students and 5% teachers believed that having problem in seeing in night is normal while 54.25% students and 95% teachers believed that problem in seeing in night is alarming. 63.1% and 5 % teachers believed watery eye is normal 36.2% students and 95% teachers believed watery eye is normal. 55.9% students and 30% teachers believed that blurring of vision is normal while 44.13% students and 70% teachers believed that it is problematic
- On the other hand according to study conducted by khabir Ahmad and fellow concluded that most children and teachers perceived healthy eyes to be those which can see well or which are beautiful, bright, fresh-looking, and neat/clean. One student mentioned 'full of dignity' as a characteristic of healthy eyes. A small number of teachers believed that health eyes are those which are "not squinting". One teacher said that "they should be straight." Some teachers believed healthy eye were those

which do not have any signs and symptoms of disease such as discharge, watering, pain, and burning.

Trauma and Misconception and Myths

- 55.86% students 10% teachers believed that irritation in sunlight is normal while 44.13% students and 90 % teachers believed irritation in sunlight or bright light is not normal. 89.38% students and 100% teachers believed pointed objects like pencil can cause injury 15% students and 0% teachers believed that pointed objects like pencil cannot cause injury. 90.5% students and 100% teachers believed that chemicals can cause injury 9.5% students and 0% teachers believed that chemicals can't cause injury. 43.6% students 75% teachers believed that kohl is not harmful 56.4% students and 25% teachers believed that kohl is not harmful.
- The strongest message from teachers and children was their concerns about the adverse effects of very bright light, sunlight, watching television for too long or sitting too close to the television, and of chemicals and diet. A large number of teachers as well as children perceived sharp pointed objects (such as pencils, sticks, stones, needles, wood, pens, and scissors) to be eye-damaging. Fourteen (8.8%) students believed that books/book-reading were not good for eyes while 11 (6.9%) students reported "too much book-reading" was harmful. Many students implicated eating chilies, onion, eggs and beef in causing eye damage. "Looking at the sun damages the eyes. Dim light damages our eyes. Chilies cause eye damage." [Boy: government schools Things that can be damaging are: TV, video games, films, cartoons, etc. If children throw stones, pencil and pen into your eyes, it can be dangerous. If you watch TV for 2-20 hours it is harmful to your eyes." [Girl: private school] "Chalk dust, excessive TV watching and insect bite damage the eyes." [Female teacher: private school] "Watching TV too close, say from around 10feet; damage the eyes because TV emits rays. An accident can also damage the eyes. Quite often stones, pointed objects, nail and sharp light damage the eyes of children." [Female teacher: private school] "Intense light, smoke, dust and dirt, reading book while in a moving vehicle, taking ice-cream and hot tea and curry - all these things damage the eyes." [Male teacher: private school]

Conclusion

Most of the students had less awareness about eye health. There were also certain misconceptions about eye health in teachers like bright light can't cause injury so there is need of technical and educational session about eye health in

schools so our school teachers could play an important role as primary eye health care workers in community.

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