Knowledge and Awareness Toward Eye Health and Disease of Children in Aseer Region, Saudi Arabia

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ABSTRACT

Introduction: Early childhood is critical for the development of the eyes and vision; any disruption at this time can result in serious visual impairment or even blindness. Children's eye examinations and treatment are not only a child's right, but also a requirement for correctly monitoring and evaluating the eyes and visual structure. The parents or guardians are responsible for making decisions about a child's eye care.

Methods: In this cross-sectional study, data were collected by the purposely constructed questionnaire. A questionnaire composed of the demographic items and items related to the awareness and knowledge about the Eye health. A questionnaire was constructed after the series of discussions between the panel of experts this panel was composed of a subject specialist, researcher, language expert. Cronbach alpha of the questionnaire was calculated.

Results: Out of 405 respondents, 12.8% were agreed that, after a chemical eye burn, it is recommended to wash the eye immediately with clean water, then taking the injured person to a hospital to continue treatment. 12.1% agreed that, Amblyopia (lazy eye) can be treated from adulthood and onwards.

Conclusion: In Saudi Arabia, parents' knowledge and awareness of eye care for their children is deemed inadequate. However, larger sample size studies are needed to confirm the current study's findings.

Keywords: Diseases, Eye, Awareness, Children

INTRODUCTION

Early childhood is critical for the development of the eyes and vision; any disruption at this time can result in serious visual impairment or even blindness. Children's eye examinations and treatment are not only a child's right, but also a requirement for correctly monitoring and evaluating the eyes and visual structure. The parents or guardians are responsible for making decisions about a child's eye care[1].

Visual impairment and blindness in children in the developing countries are mainly caused by preventable and treatable illnesses. These factors limit their access to school and work possibilities, lowering their productivity and lowering their quality of life[2].

A lack of information about preventative and promotional eye care measures among parents and guardians, as well as knowledge of where to get adequate care, is a crucial factor in childhood blindness[3].

Every year, approximately 500,000 children become blind, with 1.5 million already blind; the rate is five times higher in poorer areas than in wealthier areas. Furthermore, it is believed that a youngster gets blind every minute, with 60% of them dying within a year of becoming blind[4].

The World Health Organization (WHO) and, more recently, the United Nations (UN) support a global effort to prevent blinding eye disorders and related visual impairment, with health promotion being one of the measures to achieve this goal. Because parents are usually the primary careers for their children, the easiest way to reach them is through their parents and schools. Parents' awareness and actions for managing eye illnesses must therefore be included in a health promotion paradigm that successfully tackles childhood blindness. In India, Nigeria, and other nations, several studies have been undertaken[5,6].

METHODS

In this cross-sectional study, data were collected by the purposely constructed questionnaire. A questionnaire composed of the demographic items and items related to the awareness and knowledge about the Eye health. A questionnaire was constructed after the series of discussions between the panel of experts this panel was composed of a subject specialist, researcher, language expert. Cronbach alpha of the questionnaire was calculated. The study was conducted in the Aseer region of Saudi Arabia. Ethical approval was obtained from college of medicine, king Khalid university, Data was entered in SPSS ver.20 software for analysis, descriptive statistics was obtained

RESULTS

Cronbach alpha was 0.81.

As per table 1A, 12.8% were agreed that, after a chemical eye burn, it is recommended to wash the eye immediately with clean water, then taking the injured person to a hospital to continue treatment.

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Table 1A: After a chemical eye burn, it is recommended to wash the eye immediately with clean water, then taking the injured person to a hospital to continue treatment

	Frequency	%
I don't know	31	7.7
No	322	79.5
Yes	52	12.8
Total	405	100.0

As per table 1B, mean (SD) of age was 35.5(12.8).

Table 1B: Age distribution

Mean (SD) 35.5 (12.8)	Frequency	%
18 - 24 years	59	14.6
25 - 35 years	76	18.8
36 - 45 years	123	30.4
46 - 55 years	121	29.9
56 years and above	26	6.4
Total	405	100.0

As per table 1C 12.1% agreed that, Amblyopia (lazy eye) can be treated from adulthood and onwards.

Table 1C: Amblyopia (lazy eye) can be treated from adulthood and onwards

	Frequency	%
I don't know	31	7.7
No	325	80.2
Yes	49	12.1
Total	405	100.0

As per table 1 D 12.1% have eye diseases.

Table 1D: Do you have any eye diseases (e.g. glaucoma) or systemic diseases that may affect eye health (e.g. diabetes mellitus)?

	Frequency	%
I don't know	31	7.7
No	325	80.2
Yes	49	12.1
Total	405	100.0

As per table 1E, the relatives of 12% have eye diseases.

Table 1E: Do you have relatives who have eye diseases (e.g. glaucoma) or systemic diseases that may affect eye health (e.g. diabetes mellitus)?

	Frequency	%
I don't know	31	8.0
No	325	80
Yes	49	12
Total	405	100.0

As per table 2 12.8% agreed that Refractory error correction using laser or lasik surgeries can cure all types and degrees of vision problems.

Table 2: Refractory error correction using laser or lasik surgeries can cure all types and degrees of vision problems

	Frequency	%
I don't know	31	7.7
No	322	79.5
Yes	52	12.8
Total	405	100.0

As per table 3 12.5% agreed that, sleeping while wearing contact lenses can lead to severe eye infections

Table 3: Sleeping while wearing contact lenses can lead to severe eye infections

	Frequency	%
I don't know	31	7.7
No	323	80.5
Yes	51	12.5
Total	405	100.0

As per table 4, 12.8% agreed that, Solar eclipses can be watched safely while wearing sunglasses

Table 4: Solar eclipses can be watched safely while wearing sunglasses

	Frequency	%
I don't know	31	7.7
No	322	79.5
Yes	52	12.8
Total	405	100.0

As per table 5 12.8% agreed that, trabismus is the only cause of amblyopia (lazy eye)

Table 5: Trabismus is the only cause of amblyopia (lazy eye)

	Frequency	%
I don't know	31	7.7
No	322	79.5
Yes	52	12.8
Total	405	100.0

As per table 6, 12.1% agreed that, wearing glasses with an incorrect prescription can damage children's eyes

Table 6: Wearing glasses with an incorrect prescription can damage children's eyes

	Frequency	%
I don't know	31	7.7
No	325	80.2
Yes	49	12.1
Total	405	100.0

DISCUSSION

Children's visual systems are undeveloped when they are born. Images conveyed to the higher centers must be clear and adequately focused for healthy vision development to occur. Unless an eye examination is performed, a failure in vision development may go unnoticed. This could lead to a loss of eyesight that is difficult to correct[5-7].

Preventive measures, as well as an eye checkup and early treatment, can help children avoid becoming blind. Children in the developed world are required to have their eyes examined starting at birth and as early as six months of age. By the age of six months, the average kid has met several developmental milestones and is ready for a comprehensive eye checkup. Following that, a full eye examination is required at the preschool age and on a regular basis during the school years[8].

In a different setting, parents' knowledge of children's eye care was assessed. Sukati et al. conducted a cross-sectional study to determine parents' knowledge and practices regarding child eye health care. According to the study, 110 parents said they had never had an eye examination for their children, and 75 thought their children's vision was fine[9].

Sukati et al. also discovered that 97 (53.1 %) of parents were unaware of their children's eye conditions, with no significant relationship between education level and knowledge of eye conditions influencing children

(p = 0.112). These findings are consistent with the current findings; however, Sukati et al. used a larger sample size. The current study found that regardless of education level, parents had below-average awareness and knowledge of children's eye care[9,10].

Another study investigated parents' knowledge and attitudes toward eye examination and treatment of their children. For both parents, there was no significant relationship between their attitude toward eye care and their age, educational status, or the number of children. Most parents would only seek an eye exam for their children if they had an eye problem[11,12].

Similarly, the current study found that educational level did not correlate with level of knowledge toward eye care in children, with an unsatisfactory level of knowledge observed across all educational levels. In addition, 52.6 % of parents said they took their children for an eye exam before they went to school, while 37.1 % did not[12-15].

CONCLUSION

In Saudi Arabia, parents' knowledge and awareness of eye care for their children is deemed inadequate. However, larger sample size studies are needed to confirm the current study's findings. Furthermore, these findings should pique the interest of Saudi decision-makers in organizing awareness campaigns and educational sessions for Saudi parents about eye care for their children.

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Competing Interest: None

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