Evaluation Of Awareness Knowledge Attitude and Practice Among Primary School Teachers Regarding Eye Health

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ABSTRACT

Purpose: To assess the awareness and knowledge level regarding eye diseases among primary school teachers and to determine attitudes and practices of teachers' regarding pupils' ocular health.

Methodology: Pretested questionnaire was used to collect the participant's data. The data collection tool used comprised of four sections. First section gathers participant's demographic data, second section was for assessment of teacher's awareness and knowledge level, along with their perceptions of school eye health services and sources of their information. Third section was about attitudes of teacher's regarding pupil's eye health while fourth section was about their practices if they found any feature that can cause visual impairment in children.

Results: Result showed that out of 53 total study participants of mean age 35 years, mean percentage awareness was 65.8%, knowledge regarding all aspects was found to be high among all participants except for corneal scarring. 54.7% and 60.4% had positive attitudes towards prevention and treatment of blindness. 60.4% participants marked parent alertness while 39.6% have showed that they will refer the child to an eye specialist.

Conclusion: Primary school teachers should be trained to have adequate awareness and knowledge to assess the defective ocular symptoms among children. More Innovative strategies are required to intensify the eye health as an important component of educational institutions and school health services.

Key Words: Primary school teachers, primary health care, eye health, school eye health services.

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INTRODUCTION

Vision accounts for 85% of information received from the environment.[1,2] Vision is important for learning and communicating.[3,4] Experts believe that 80% of learning is done through a child's eyes.[5,6] Children always use their eyes in the classroom for different learning purposes. Therefore, schooling has increased visual needs especially in children's having defective vision.[1-5] Primary school teachers (PSTs) play a crucial role in prevention of blindness in children promoting primary health care (PHC).[7,8] As PSTs are more in touch with children in their early ages of life, so their knowledge and awareness of eye health problems are crucial to impact the establishment of better eye health-care practices among their students.[9,10]

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Primary school teachers see and communicate with children's hours daily so can easily detect abnormalities in children's eyes.[11,12]

METHODOLOGY

This study was done using descriptive cross sectional study design. Four primary schools in Peshawar were visited for data collection. The study was conducted on total of fifty-three (53) primary school teachers who were teaching up to grade 5. The total duration was of six-months i-e from July, 2021 to December, 2021. Pretested questionnaire was used to collect the participant's data. The data collection tool used comprised of four sections. First section gathers participant's demographic data, second section was for assessment of teacher's awareness and knowledge level, along with their perceptions of school eye health services and sources of their information. The third section was about attitudes of teacher's regarding pupil's eye health while fourth section was about their practices if they found any feature that can cause visual impairment in children.

DATAANALYSIS

Data was analysed through the commercially available computer program Statistical Package for Social Science (SPSS) version 17. Frequencies and mean percentages for awareness, knowledge, attitudes and practices were calculated. Cross tabs were calculated for mean percentage awareness, knowledge, attitudes and practices with demographic profile of included teachers. Probability value (P Value) was generated using the T-Test for categorical comparison of variables, while p value of 0.05 was considered statistically significant.

RESULTS

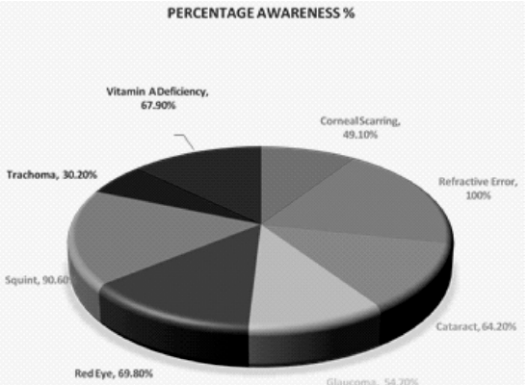
Results showed that total of fifty- three (53) teachers out of which eighteen (18) were male and thirty-five (35) were female, their mean age was 35 years. Mean percentage awareness regarding ocular health was found to be moderate 65.8%. Mean percentage knowledge among aware teachers was found to be high in all aspects except regarding corneal scarring which found to be low as 48.71%. However, 79.2% of teachers marked ocular symptoms identification and timely referral as necessary components of school health services. 54.7% of teachers had positive attitudes towards prevention of blindness while 60.4 had positive attitudes towards treatment of blindness. All the teachers who participated in this study showed the prevention and treatment as very important. Practices among teachers were that 60.4% teachers marked that they would alert the parents if they notice some defective symptom in their pupil while 39.6 showed that they will directly refer the children with defective symptom to an eye specialist or eye care providing centers.

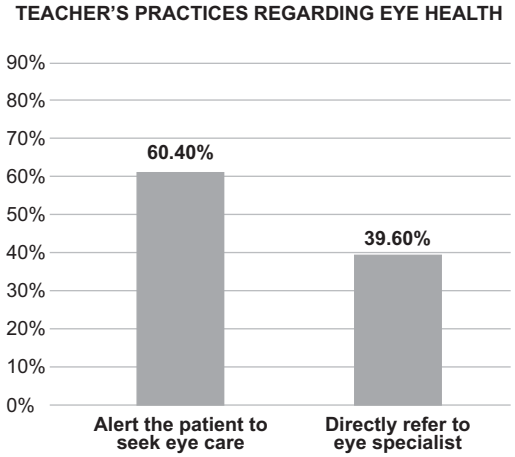
Table -1: Awareness Regarding Ocular Defects

Awareness Regarding Ocular Defects				
	Aware(n)	**Un Aware(n)**	**Total (n)**	**Awareness %**
Corneal Scarring	26	27	53	49.1
Refractive Error	53	0	53	100
Cataract	34	19	53	64.2
Glaucoma	29	24	53	54.7
Red Eye	37	16	53	69.8
Squint	48	5	53	90.6
Trachoma	16	37	53	30.2
Vitamin A Deficiency	36	17	53	67.9
Mean % Awareness	65.8%			
P-Value	0.04			

Table - 2: Knowledge Regarding Features, Causes and Treatment of Ocular Defects

	Knowledge Level			Mean % Knowledge
	Features n %	Causes n %	Treatment n %	
Cornea scarring	20 (76.9)	9 (34.6)	9 (34.6)	48.71%
Refractive error	50 (94.3)	48 (90.5)	50 (94.3)	94.96%
Cataract	28 (82.3)	21 (61.7)	31 (91.1)	78.43%
Glaucoma	26 (89.6)	18 (62.0)	24 (82.7)	78.16%
Red eye	37 (100)	36 (97.2)	35 (94.59)	97.29%
Strabismus	48 (100)	43 (89.5)	4(89.5)	93.05%
Trachoma	9 (56.2)	13 (81.2)	13 (81.2)	72.91%
Vitamin A deficiency	18 (50)	37 (100)	42 (100)	89.81%





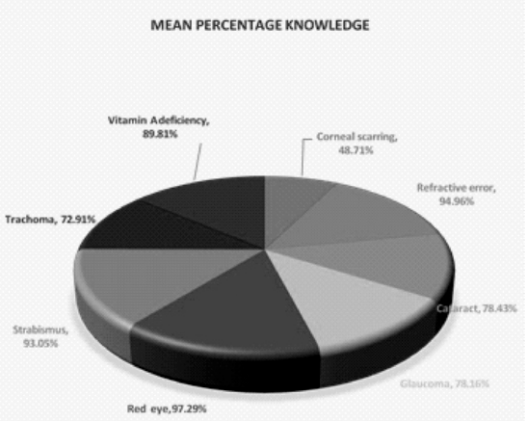


Table - 3: Comparison of Age, Gender, Years of Experience with Awareness Regarding Defective Eye Conditions

	Mean Percentage Awareness %		P-Value
Age	20-30 Years	53.28%	0.03
	31-40 Years	65.00 %	
	41-50 Years	82.28%	
	51 or more Years	93.75%	
Gender	Male	64.58%	0.01
	Female	66.42%	
Level of Qualification	Graduation	63.25%	0.06
	Masters or above	70.00%	
Years of experience	1-5 Years	56.80%	0.07
	6.10 Years	63.88%	
	More than 10 Years	83.64%	

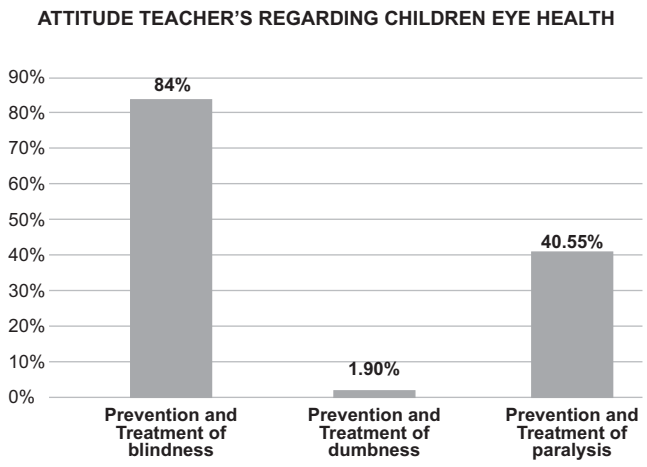


Table - 4: Comparison of age, gender, years of experience with mean percentage knowledge of defective eye conditions

	Mean Percentage Knowlege %		P-Value
Age	20-30 Years	48.00%	0.04
	31-40 Years	55.00%	
	41-50 Years	71.00%	
	51 or more Years	71.00%	
Gender	Male	53.23%	0.13
	Female	58.33%	
Level of Qualification	Graduation	51.63%	0.06
	Masters or above	65.62%	
Years of experience	1-5 Years	49.00%	0.04
	6.10 Years	58.87%	
	More than 10 Years	66.00%	

Table - 5: Comparison of Age, Gender, Years of Experience use with Attitudes of Teachers Towards Prevention and Treatment of Blindness

	Mean Percentage Positive Attitude%		P-Value
Age	20-30 Years	68.00%	0.01
	31-40 Years	65.00%	
	41-50 Years	83.33%	
	51 or more Years	100.00%	
Gender	Male	72.00%	0.00
	Female	71.00%	
Level of Qualification	Graduation	69.00%	0.05
	Masters or above	77.00%	
Years of experience	1-5 Years	62.00%	0.05
	6.10 Years	76.00%	
	More than 10 Years	82.00%	

DISCUSSION

Mean percentage awareness regarding ocular health was found to be moderate 65.8%.

According to Nigerian study in 2020 only 15.0% teachers had good knowledge of their pupils' eye health while in this study 81.66% teachers were having high knowledge. [3,4,13]

According to Nigerian study 96.6% teachers had a positive attitude while in this study 55.7% showed positive attitudes toward treatment and prevention of blindness.[3,4,17,18]

According to Nigerian study 45.4% teachers showed good practices, however a study conducted in Rawalpindi Pakistan showed good practices among 10.6% while in our study all participants showed good practices. [3,4,19,20]

The mean percentage awareness was high in 41-50 or more age group (88%) while moderate in 20-40 years of age group teachers having mean percentage awareness of about 59%. Mean percentage knowledge was also found to be high in older age group that was 71% in age group 41 -50 or more years. However, these results do not support the study done in Rawalpindi which stated that knowledge level was high in age group 26-45 years of age due to lack of awareness in older age group teachers .[21]

Mean percentage awareness among male and female was 64.58% and 66.42%, found to be moderate in both groups. Mean percentage knowledge in male and female was 52.23% and 58.33% respectively which showed slight variation in both groups but have moderate level of knowledge. However, study done in Rawalpindi and Nigeria showed that female was more aware and knowledgeable than male.[21-23]

Awareness was found to be high (83.64%) in more than 10 years of experienced teachers while moderate (60.3%) in less years of experienced teachers. Mean percentage knowledge found to be moderate in both groups but having relatively more in 10 years and more experienced teachers that was 66% while in less than 10 years of experienced teachers it was 54%. This result is also in favour of study done in Northwest Ethiopia which shows the odds ratio of subjects having 10 years or more teaching experience was 2.53 times higher than odds ratio in 1-10 years of working experience.[3,4,21]

CONCLUSION

It is concluded that awareness and knowledge regarding various ocular conditions that can cause visual impairment in children which can be prevented by early detection and timely referral was found to be moderate in this study. Although attitudes and practices were found to be good in them. Therefore, primary school teachers should be trained to have adequate awareness and knowledge to assess defective ocular symptoms among children. More Innovative strategies are required to intensify the eye health as an important component of educational institutions and school health services.

RECOMMENDATION

It is recommended that as primary school teacher's lack awareness and knowledge in certain specific areas of eye diseases, that should be assessed on higher levels. Also, government, media and stake holders should make strategies to present the eye health as an important component of public health. Should have to start the awareness campaigns, structured workshops and some innovative strategies for upgradation of primary school

teachers' knowledge to intensify the eye health education as important component in school curriculum.

Conflict of Interest: None to declare

Ethical Approval: The study was approved by the Institutional Review Board / Ethical Review Board Vide No.837F/UGS/PICO/2021.

Author Contributions: Jasra Khan: Design, Data Analysis.

Azmat Jehan: Concept, Data Collection.

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