

## Assessment of Mothers' Role in Care of Ophthalmological Problems in Their Children

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### Abstract

Diseases should be arranged as one of lines of management. The aim of this study was to assess mother's role in caring their children with ophthalmological problems. **Design:** A descriptive design was used. **Settings:** The study was conducted in the Ophthalmology Outpatient Clinics which are, Ophthalmology Hospital affiliated to El-Mansoura University Hospital, El-Demerdash Hospital, affiliated to Ain Shams University and Children Hospital, Abou El-reesh affiliated to Cairo University. **Subjects:** A purposive sample that composed of 300 mothers having children with Ophthalmological problems. **Tools of data** collection involved – a designed questionnaire sheet to assess mothers and their children characteristics and mothers' knowledge about eye problems of their children and its reported practice. **Results:** Majority of mothers have little awareness about ophthalmological diseases, only 26.7% of mothers were able to correctly define myopia. Half of the studied mothers accurately performed hygiene steps for caring their children eyes. Only nearly one third 30.3% of mothers give their children diet rich with Vitamin A. **Conclusion:** Majority of mothers have little awareness and knowledge about ophthalmological diseases and this was reflected upon their reported practice in caring of their children with eye diseases. **Recommendations:** Periodic eye examination for children should be regularly scheduled as means to facilitate early detection and treatment of eye problems such as strabismus, anisometropia and high refractive errors. Training of mothers to improve their practice for caring of children with eye .

**Key words:** Ophthalmological problems, caring, children, mothers .

### Introduction

Childhood ophthalmic disorders can seriously impact on development, education, future employment opportunities and quality of life. The consequences are especially severe in low resource settings where resources and education are lacking. Poor education and an inability to fully participate in daily life greatly add to the difficulty and suffering those children with poor vision or blindness experience (Mehari, 2014).

It's important the most eye problems presenting in childhood be corrected as early as feasible during childhood. Failure to

correct these problems at an appropriate time early in life may result impermanent visual acuity ([www.kbhhsosvital](http://www.kbhhsosvital), 2012).

Diseases of the eye may be related to variety of systemic disorders. Isolated problems like infections, congenital anomalies, trauma and vitamin deficiency are also commonly found in children. Prompt management is important for prevention of complication (Datta, 2007).

Prevalence of eye diseases differ in different communities according to many factors, which include social and environmental characters of the community, health habits of the community, personnel hygiene and technical methods used in diagnosis of eye diseases. The overall incidence is approximately 2.5 per 100,000 children. The incidence is higher in developing countries, in low birth weight infants (*Kliegman et al., 2011*).

Globally, an estimated 70 million blind years are caused by childhood blindness. Approximately 500,000 children become blind every year, which is equivalent to one child every minute; 60% die within 1 to 2 years of becoming blind. The prevalence of childhood blindness is especially high in low-resource areas; among 1.5 million blind children worldwide, 70-90% of them are in the poorest countries of Africa and Asia (*Mehari, 2014*).

Common problems include refractive errors, strabismus, amblyopia, infections, and trauma. Other problems encountered include ocular complications of systemic disease, developmental and genetic conditions, and neoplasms affecting the globe and orbits (*Basil et al., 2007*).

As well as, the common symptoms arise from eye strain include inflammation, aching or smoothing of the eyes, squinting, a short attention span, frequent headaches, difficulties with school work, or inability to see the blackboard (*Price, 2008*).

Mothers are expected to be extensively care giver of their sick child at home. Research has identified a higher level of nursing tasks under taken by mothers specially mothers found that mothers assumed primary responsibility for their child's technical and nursing care carrying out procedures of their children and hence for themselves (*Sidy and Widdos, 2005*).

Primary eye care includes the following: eye clinical activities that are manipulated by mothers or referral of patients with eye disease, eye medications as drops instillation, ointment applications, hot and cold applications and eye exercise. Therapeutic purposes. Hot and cold eye compresses: Hot compresses may be used to relieve discomfort. Because heat increases circulation (which enhance absorption and decreases inflammation), hot compresses may promote drainage of superficial infections, cold compresses can reduce swelling or bleeding and relieve itching. Eye irrigation: Used mainly to flush secretions, chemicals, and foreign objects from the eye (*Kowalak et al., 2009*). Eye exercise is used to improve vision skills such as eye movement control, eye focusing and coordination, and the teamwork of the two eyes ([http://en.wikipedia.org/wiki/ Vision-Therapy](http://en.wikipedia.org/wiki/Vision-Therapy), 2015).

### Significance of the Study

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The children eyes problems represent a traumatic stressful for their mothers especially in rural areas where there are limited health care. Beside lack of mothers wariness to handling their children, expenses finance to managed, descrapences in managing their boys rather than girls and prefer earth cultivate rather than learning in school that needles vision dependence, from here, the researcher assesses mothers knowledge had children with vision problems and correct their mistradition and misconception about their caring of children later on.

### Aim of the study

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To assess mother's role in prevention and care their children with ophthalmological problems.

### Research questions:

- 1- To what extent the mothers' health awareness of fact the prevention and care of their children with ophthalmological problems?

- 2- Are the mothers' socio-demographic characteristics affecting prevention and care of their children with ophthalmologic problems?

### **Subjects and Methods**

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#### **Research design:**

A descriptive research design.

#### **Settings:**

The study was conducted in the Ophthalmology Outpatients Clinics which are:

- Ophthalmology Hospital affiliated to El-Mansoura University Hospital.
- El-demerdash Hospital, affiliated to Ain Shams University.
- Children Hospital, Abou El-reesh affiliated to Cairo University.

#### **Subjects:**

A proposal sample was included 300 (5%) of total mothers and their children attending previously mentioned settings.

#### **Inclusion Criteria:**

The sample composed of mothers having children with ophthalmological problems under 18 years from both sexes and free from any chronic diseases.

#### **Type of sample: Purposive sample**

#### **Exclusion Criteria:**

Cases with any chronic diseases or disabilities (e.g., DM, renal failure, nephritic syndrome... etc.)

#### **Tools of data collection:**

It was divided into:

- a) Predesigned questionnaire through mothers interview to assess the mothers knowledge about the prevention and care of children with ophthalmological problems. It is written after reviewing updated articles in Arabic language and includes these parts.

**Part(1):** Mothers' socio-demographic characteristics such as age, level of education, working, residence ..... etc.

**Part (2):** Mothers' knowledge about definition of eye problem, types of eye disorders, clinical manifestations, complications and management.

**Part(3):** Mother's workable knowledge related to care of children with eye problems to assess mothers' practical knowledge concerning caring of their children.

#### **Questionnaire:**

#### **Scoring system:**

Mothers responses were classified into:

- Satisfactory knowledge > 60%
- Unsatisfactory < 60%.

- b) Observation Checklists: they were utilized to assess mothers' caring giving to their children with eye problems. It included eye care by exercise ([www.wikihow.com](http://www.wikihow.com)), hot and cold compresses; eye drops instillations and eye ointment application (therapeutic and nutrition) (*Kowalak et al., 2009*).

#### **Reported Procedures:**

Each procedure has 10 marks accordingly

([www.mayoclinic.org/.../hand-washing/art-20046253](http://www.mayoclinic.org/.../hand-washing/art-20046253))

Weighing the steps and classified:

- Done adequately > 70.
- Done inadequately 70-50.
- Not Done < 50.

### **Contents validity:**

Tools contents were exposed to expertise Jury Committee of Medical & Nursing to ensure its validity and correction was done according to their opinionnaires.

### **Operation of the study:**

#### **1- Preparatory phase:**

Tools of data were prepared by the researcher after reviewing related references.

#### **2- Administrative phase:**

Official letters to conduct the study will be obtained from the Dean of Faculty of Nursing, Ain Shams University to the director of children's hospitals affiliated to Ain Shams University Hospitals, Children Hospital affiliated to Cairo University Hospital, Ophthalmology Hospital affiliated to El-Mansoura University Hospital and Medical and Nursing Directors of the Study settings to get their permission to collect the study data.

### **Pilot study:**

The study included 5% (15 mothers) from total sample to study sample attending the previously mentioned setting. A pilot study was conducted to assess clarity of the study tools,

applicability of the tools, time required to fill in the study tools, time consumed to fill in the tools, validity; from here, cases participating in the pilot study were excluded from the total sample later.

### **Field work:**

The data collection consumed 6 months (two days per week, from 8 am - 2 pm O'clock) and the researcher explained the aim and the nature of the study to subjects to obtain their approval. Mothers filled questionnaires lasting 15-20 minutes during the waiting time of outpatients clinics; the researcher was available two days in each setting alternately. The researcher filled working checklist spared 10 minutes where the mothers handling their children.

### **Ethical consideration**

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Aim of the study and its expected outcomes were explained to the study subjects, the study was secured that all the gathered data was used for the research purposes only. They were allowed to withdraw from the study whenever they want.

### **Statistical Design**

Data collected from the studied sample was revised coded and entered using computer. Data entry and statistical analysis were fulfilled using the statistical package for social sciences (SPSS). Data were presented using descriptive statistics in the form of frequencies, percentages, Chi-square test ( $\chi^2$ ) was used for comparisons between qualitative variables and spearman correlation analysis was used for assessment of the inter-relationships among quantitative variables. Statistical significance was considered at P-value <0.001.

## Results

**Table (1):** Number and percentage distribution of studied children according to their sociodemographic data.

Items	Total number (300)	
	NO	%
<b>Age of children</b>		
Less than one year	44	14.7
1 > 5 years	93	31
5 > 10 years	109	36.3
10 - 18 years	54	18
<b>Mean ± SD</b>	<b>13.8 ± 2</b>	
<b>Sex</b>		
Male	155	51.7
Female	145	48.3
<b>Level of education for children</b>		
Do not read and write	43	14.2
Nursery school	71	23.7
Read and write	11	3.7
Primary school	119	39.7
Prep school	17	5.7
Secondary school	39	13
<b>Ranking</b>		
First	34	11.3
Second	135	45
Third	100	33.3
Fourth & more	31	10.3
<b>Child's diagnosis</b>		
Myopia	32	10.7
Hyperopia	17	5.7
Astigmatism	7	2.3
Cataract	23	7.7
Glaucoma	18	6
Blepharospasm	12	4
Squint	43	14.3
Conjunctivitis	87	29
Eye bleeding	26	8.7
Retinoblastoma	2	0.7
Deflection and refraction	8	2.7
Night blindness	6	2
Blindness	2	0.7
Tumor in Eyes	7	2.3
Congenital anomalies in the eye	10	3.3

**Table (1):** reveals that the mean age and standard deviation of the studied children was  $13.8 \pm 2$  and more than half (51.7%) of them were male. Moreover, 62.1% of studied children were in the different stages of education and more than one third (45%) of them were ranked as second child in their family. In this context, more than one fourth 29% of children were diagnosed conjunctivitis.

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**Table (2):** Number and percentage distribution of studied children according to their eye symptoms.

Mothers' knowledge about ophthalmological problems	Total number (300)			
	Yes		No	
	NO	%	NO	%
<b>Pain in the eye</b>	265	88.3	35	11.7
<b>Redness in the eye</b>	231	77	69	23
<b>Edema in the eye</b>	111	37	189	63
<b>Eye secretion</b>	172	57.3	128	42.7
<b>Burning sensation in the eye</b>	204	68	96	32
<b>Foreign body sensation in the eye</b>	160	53.3	140	46.7
<b>Eye itching</b>	182	60.7	118	39.3
<b>Blurred vision</b>	188	62.7	112	37.3
<b>Double vision</b>	153	51	147	49
<b>Unclear vision</b>	198	66	102	34
<b>Headache</b>	194	64.7	106	35.3
<b>Strip in the eye</b>	175	58.3	125	41.7
<b>Unseen distance objects</b>	200	66.7	100	33.3

**Table (2):** revealed that the majority (88.3%) of studied children had pain in their eyes, while more than three fourths (77%) of children had redness of their eyes followed by 68% of them had burning sensation in their eyes. In contrast, the more than one third 37% of children had edema in their eyes.

**Table (3):**Number and percentage distribution of studied mothers according to their knowledge about ophthalmological problems.

Items	Total number (300)	
	NO	%
<b>Causes of ophthalmological diseases in children</b>		
Bacterial infection.	96	32
Viral infection.	50	16.7
Accidental.	24	8
Increase intraocular pressure.	61	20.3
Genetic causes.	49	16.3
Unknown.	20	6.7
<b>Symptoms of ophthalmological diseases in children</b>		
Pain in the eye.	44	14.7
Redness in the eye.	91	30.3
Eye lid swelling.	10	3.3
Blurred vision.	43	14.3
Itching sensation in the eye.	4	1.3
All the above.	108	36
<b>Form of congenital anomalies in the eye</b>		
Lack of eyelids.	20	6.7
Distichia.	18	6
Polycystic eye.	45	15
The magnitude of the eyeball.	101	33.7
All the above.	116	38.7

**Table (3):** represents that slightly less than one third (32% & 30.3%) of studied mother reported that bacterial infection as causes of ophthalmological diseases in their children and redness in the eye as symptoms of ophthalmological diseases in their children.

**Table (4):**Number and percentage distribution of studied mothers according to their total knowledge about ophthalmological diseases.

Total mothers' knowledge	Total number (300)	
	No	%
Unsatisfactory	225	75
Satisfactory	75	25

**Table (4):** represents that three quarters (75%) of studied mother had unsatisfactory knowledge about ophthalmological diseases, while the rest (25%) of them had satisfactory knowledge.

**Table (5):**Number and percentage distribution of studied mothers according to their reported practice regarding protection of children from ophthalmological diseases.

Items	Total number (300)					
	Always		Usually		Never	
	NO	%	NO	%	NO	%
Periodic examination.	272	90.7	28	9.3	0	0
Maintain personnel hygiene for children.	216	72	78	26	6	2
Give the child diet rich with vitamin A, protein	91	30.3	193	64.3	16	5.3
Give the child diet rich with proteins.	52	17.3	109	36.3	139	46.4
Give the child diet rich with vitamin H.	149	49.7	84	28	67	22.3
Minimize hours of watching TV, I Pad	98	32.7	169	56.3	33	11
Expose the child to sun rays for long periods.	79	26.3	169	56.3	52	17.3
Wash hands before and after child caring.	157	52.3	67	22.3	76	25.3
Continuous observation for child's eye.	161	53.7	104	34.7	35	11.7
Avoid contact with affected children.	174	58	92	30.7	34	11.3
Good observation for date of any medication.	239	79.7	33	11	28	9.3
All of the above except exposure to sun rays.	212	70.7	71	23.7	17	5.6

**Table (5):** reveals that 90.7% of studied mothers always make periodic examination for their children 'eyes, while 64.3% usually give their children diet rich with vitamin A. In contrast, the minority of studied mothers 2% reported that they don't maintain their children's hygiene.

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**Table (6):**Number and percentage distribution of studied mothers according to their reported practice regarding ointment application.

Technique of using ointment application and eye drops instillation	Total number (300)					
	Correct		Usually		Never	
	NO	%	NO	%	NO	%
Make sure that it is the ointment prescribed by the doctor	294	98	6	2	0	0
Check the expiratory date of the ointment	225	75	71	23.7	4	1.3
Wash hands thoroughly with soap and water	52	17.3	187	62.3	61	20.3
Avoid touch the tip of the tube against the eye	63	21	79	26.3	158	52.7
Hold the tube between the thumb and forefinger	169	56.3	83	27.7	48	16
Brace the reaming finger against the face	156	55	64	21.3	71	23.7
Tilt the child's head forward slightly	105	35	124	41.3	71	23.7
Pull down the lower eyelid	123	41	100	33.3	77	25.7
Squeeze the ribbon of ointment into the lower eyelid	113	37.7	147	49	40	13.3
Blink the eye gently close the eye for 1 or 2 minutes	213	71	70	23.3	17	5.7
Observe for any side effect	171	57	104	34.7	25	8.3

**Table (6):** represented that the most of studied mothers (98%) always (make sure that it is the eye ointment prescribed by the doctor. In contrast, the minority of studied mothers (1.3%) stated that check the expiratory date of the ointment.

**Table (7):**Number and percentage distribution of studied mothers according to their reported practice regarding eye drops application.

Items	Total number (300)					
	Correct		Usually		Never	
	NO	%	NO	%	NO	%
Make sure that it is the eye drops prescribed by the doctor	290	96.7	10	3.3	0	0
Check the expiratory date of the eye drops	266	88.7	34	11.3	0	0
Wash mother's hands thoroughly with soap and water	62	20.7	213	71	25	8.3
Make sure that there is no discharge outside the child's eye	48	16	117	39	135	45
Tilt the child's head to the back, so the drops stay in the eye.	178	59.3	74	24.7	48	16
Gently pull out the lower eyelid	146	48.7	146	48.7	8	2.6
Keep the child's eye open	105	35	108	36	87	29
Hold the bottle far enough away from the eye that it doesn't touch, and then squeeze	177	59	80	26.7	43	14.3
Shut the eye for a moment, then blink several times to distribute the eye drop	140	46.7	117	39	43	14.3
Observe for any side effect	214	71.3	50	16.7	36	12

**Table (7):** displays that more than one tenth (16%) of studied mothers always make sure that there is no discharge outside the child's eye. Meanwhile, 48.7% of studied mothers reported that their practice usually was gently pull out the lower eyelid. On the same context, less than one third 29% of studied mothers reported never to keep the child's eye open.



**Table (8):** Number and percentage distribution of studied mothers according to their reported practice regarding eye's hot compresses.

Items	Total number (300)					
	Always		Usually		Never	
	NO	%	NO	%	NO	%
Wash mother's hands thoroughly with soap and water	298	99.3	2	0.7	0	0
Fill a medium size bowl with lukewarm tap water	239	79.6	59	19.7	2	0.7
Submerge the folded washcloth in the lukewarm water to moisten it	70	23.3	211	70.4	19	6.3
Remove the folded washcloth from the bowl of water. Without wringing out the washcloth, press it gently against the child closed eyes	54	18	82	27.3	164	54.7
Put back the washcloth in the bowl of lukewarm water every few 10 seconds to keep it warm. Reapply the warm compress to the child eyes about 20 times, or for five minutes	151	50.3	123	41	26	8.7
Not to touch both eyes with the same cloths to reduce the risk of spreading of infection from one eye to the other	197	65.7	60	20	43	14.3

As observed from this table, the most 99.3% of studied mothers wash their hands thoroughly with soap and water and usually less than one (0.7%) from studied mothers done their step. More than three fourth 79.6% of studied mothers always fill a medium size bowl with lukewarm tap water. Nearly three fourth 70.4% of studied mothers never submerge the folded wash cloth in the lukewarm water to moisten it usually and not done by less than tenth 6.3% of studied mothers vice versa less than fifth 18% of studied mothers always remove the folded wash cloth from the bowl of water without wring out the wash cloth, press it gently against the child closed eyes, and more than half 54.7% were never.

**Table (9):**Number and percentage distribution of studied mothers according to their total reported practice about caring of children with ophthalmological diseases.

Total mothers' reported practice	Total number (300)	
	NO	%
Not done.	21	7
Don inadequately.	269	89.7
Don adequately.	10	3.3

**Table (9):** represents that, the great majority (89.7%) of studied mother reported done by inadequate totaling practice-related to children, while the rest (7% &3.3%) of them reported never and done adequately practice toward caring of their children with ophthalmological problems.



### Discussion

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As regards children characteristics; most of them were males with average age  $13.8 \pm 2$  years and most of them were from 5 to 10 years nearly one third. More than one third were in the primary schools and ranked in 3<sup>rd</sup> order in their family (**Table 1**).

The most commonly reported eye symptoms (**table 2**) were pain, redness and unseen objects which may be explained by that the most common children having eye diseases were conjunctivitis and myopia. Similarly *Kotb et al. (2006)* mentioned that the signs of inflammation especially redness, itching and swelling are the main symptoms that draw attention for medical consultation.

The present findings (**Table 2**) illustrated that the majority of mothers have little awareness about ophthalmo-logical diseases because the lack of healthy awareness from mass media or Ministry of Health instruction that mothers having children with eye problems getting it in their rural areas. This agrees with [Aldebasi's study](#) revealed low awareness to visual symptoms and even lower for presbyopia, especially for basic education groups ([Aldebasi, 2011](#)).

Additionally, *Sivak (2012)* mentioned that, the main symptom of myopia as causing the image that one sees when looking at a distant object to be out of focus, but in focus when looking at a close object.

Assessing level of knowledge towards different common health eye problems was done. In **table (3)** it could be related to assess knowledge of mothers deficits about caring of their children having ophthalmological problems, most of the mothers mentioned bacteria as the main cause of eye diseases and redness and pain as the main symptoms. However they identified most of congenital anomalies specially the magnitude of the eye ball. *Mafwiri et al (2014)* clarified that improving the knowledge of mothers towards eye problems, its causes, symptoms and early

seeking of medical care can dramatically decrease the rate of childhood ocular morbidity and can prevent blindness.

**Table (4)** clarifies that nearly three fourths of mothers have unsatisfactory knowledge towards caring their children having ophthalmological problems, vice versa approximately one fourth of mothers have satisfactory knowledge towards caring their children having ophthalmological problems.

As findings of the current study that (**Table 5**) clarified the most important behaviors (reported practice) that affect the eye health; the most commonly always done with adequate practice were periodic examination, good observation for date of any medication and all good practices except exposure to sun were performed by less than three fourths. The least of studied mothers less than half of mothers done practice as give diet riched in proteins and washing hands before and after caring the child. This may reflect the bad hygienic conditions where the children live and lack of proper knowledge about the value of balanced diet.

*Misra et al (2015)* noticed that that the most frequently good practice regarding eye care was regular medical examination however the least followed practice was self-medications. Moreover, *Reynolds (2007)* noticed high level of malpractice regarding mothers care of eye diseases especially in items of early seeking of medical advice and diet rich in vit A and they explained that by poor living conditions.

Practice of hand washing was cleared in (**table 5**); most of the mothers always do steps of hand washing except in the step of washing properly between fingers. *Luby et al (2005)* stated in his study that hand washing is the single most effective way to prevent the spread of infections. *Rabie and Curtis (2006)* found a strong evidence that hand washing with soap can considerably reduce the incidence of infectious eye disease.

*Fewtrell et al (2005)* recommended hand washing when dealing with children in the following situations; At the start and end of every play session, before preparing/serving food, before and after assisting children to eat, before and after assisting a child in the toilet, or changing a nappy, before and after touching any cut, wounds or rashes, after handling dirty items e.g. handling rubbish and when hands are visibly dirty.

Moreover, *Scott et al (2003)* stated these steps for proper hand washing of mothers; removing any jewelry that may stop mothers washing all surfaces of their hands, wet hands with warm running water, apply liquid soap, rub hands together to cover all surfaces don't forget in-between their fingers, rub hands together for 20 seconds, rinse hands making sure they have removed all the soap and bubbles and take time to dry their hands thoroughly with single use paper towel. This will usually take between 40-60 seconds.

In the context, mothers reported practice (**table 6**) related of using eye drops was cleared; mothers always apply eye drops properly except for making sure that no discharge on cheeks that may be explained by irritable nature of children and inability to control their repeated movements. As in **table (7)**, *Bersani et al (2013)* cleared the proper use of eye drops as the same steps explained in ointment with addition of shaking the bottle well before use.

Practice of eye compresses was fulfilled in **table (8)**; where most of the mothers properly apply hot compresses well except for removing the folded wash cloth from the bowl of water, without wringing out the wash cloth. As regards cold one the practice was all good except in the item of removing excess water by twisting before applying it gently to the child closed eyelids; *Leversha and Anson (2012)* clarified the use of 2 types of compresses; **dry warmth** which is placing a protective layer of fabric between a warm compress and the [skin](#). Heating pads and hot

water bottles can be used on larger surfaces needing heat. As well as **moist warmth** that can be more effective in relieving [muscle pain](#) than dry warmth. Moreover, *Haq et al (2013)* explained the role of cold compresses in protecting the body tissues by slowing the metabolic rate; they frequently used to treat allergy in the eye.

The findings in **table (9)** clarify that the relation between total knowledge and total practice scores was demonstrated, the level of adequately done practice was significantly higher among mothers with satisfactory level of knowledge. However the mothers with not done practice were lower satisfactory knowledge among them. *Yarnall et al (2003)* reached to a result that this significant relation carries a challenge to educate, motivate mothers and provide full support to those who wish to protect their children against progress of eye problems. Moreover, the relation the relation between knowledge and practice in empowerment was magnified and enabling mothers to make control over the whole family life.

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## Conclusion

It was concluded that high prevalence of ocular morbidity among school children was observed among children of 5-10 years age group. More than one fourth of the studied children had conjunctivitis. Errors of refraction which account mostly for low vision and visual impairment such as myopia, hypermetropia and astigmatism constitute the main eye problem of our study children. Majority of mothers have little awareness, unsatisfactory knowledge and inadequate practice about ophthalmological diseases and this was reflected upon their practice in caring of their children with eye diseases.

### Recommendations

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It's recommend that:

- Periodic eye examination for children should be regularly scheduled as a means to facilitate early detection and treatment of problems such as strabismus, anisometropia and high refractive errors.
- Follow-up study to evaluate practice of mothers after their training for caring of children with eye diseases.
- Training of mothers to improve their practice of caring of their children with eye diseases should be arranged as one of the lines of management.
- Nutritional support and environmental improvement is recommended to have a role in prevention and management of morbidity among children.

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