

ISSN: 2309-3234

TMSS MEDICAL COLLEGE JOURNAL

Volume 01, Number 01, July 2013



AN OFFICIAL PUBLICATION OF TMSS MEDICAL COLLEGE, BOGRA.



**TMSS MEDICAL COLLEGE, BOGRA
JOURNAL, JULY 2013**

**AN OFFICIAL PUBLICATION
OF
TMSS MEDICAL COLLEGE, BOGRA**



TMSS Medical College, Bogra

Content

Editorial

Acknowledgement/Preface	2
<i>Professor Raghieb Ahsan</i>	

Information to Authors

4

Article

Title: Hospital Waste Management In Selected Hospitals Of Faridpur.	6
<i>Rahman Latifur, Ahsan Raghieb Miah Z. I, Ahmed Margub, Catherine Shukti</i>	
Association Between Hygienic Practices and Common Ocular Infection	13
<i>Rahim MM, Mazid MA, Sultana N, Rahman MM</i>	
Common ocular diseases among the patients attending at Rafatullah Community Hospital, Bogra	18
<i>Rahim MM, Mazid MA, Sultana N, Rahman MM</i>	
Proctoscopic Pattern of Common Anorectal Diseases Attending at Rafatullah Community Hospital, Bogra.	24
<i>Mazid MA, Rahim MM, Sultana N</i>	

Case Report

Ileocecal Tuberculosis Presented As Acute Appendicitis: A Case Report	28
<i>Rahman MM, Rahim MM</i>	

Article type: Original

ASSOCIATION BETWEEN OCULAR HYGIENIC PRACTICES AND COMMON INFECTIVE OCULAR DISEASES

Rahim MM^{1*}, Mazid MA², Sultana N³, Rahman MM⁴

1. **MM Rahim***, MPCS, MPH, Consultant Ophthalmology, Rafatullah Community Hospital & TMSS Medical College, Bogra and Principal, TMSS Medical Institute of Research and Technology, Bogra, Bangladesh. Email: dr.mahbub.rahim@gmail.com. Mobile: +8801713377023
2. **MA Mazid**, FCPS(Surgery), Assistant Professor, Department of Surgery, TMSS Medical College and Rafatullah Community Hospital, Bogra, Bangladesh. Email: amazidmilon@gmail.com, Mobile: +8801914 123 715.
3. **N Sultana**, MBBS, Registrar, Dept of Gynecology and Obstetrics, TMSS Medical College and Rafatullah Community Hospital, Bogra, Bangladesh. Email: nahidamz@gmail.com. Mobile: +8801717623436.
4. **MM Rahman**, MS (Surgery), Assistant Professor and Head of the Department, Department of Surgery, TMSS Medical College and Rafatullah Community Hospital, Bogra, Bangladesh. Email: dr.mostafiz1975@yahoo.com. Mobile: +8801716307255

*Corresponding author

Abstract

Background: Many people become blind in the world due to ocular infection which can be prevented. In Bangladesh also there are incidences of ocular infections and majority of the people is illiterate. Through proper health education it may be possible to decrease the incidences of ocular infections.

Objective: To find out the association between the ocular hygiene practices and most common ocular infective disease among the patients attending RCH, Bogra.

Methods: An analytic cross-sectional study was conducted to assess and determine the ocular disease pattern at Rafatullah Community Hospital (RCH), Bogra, Bangladesh. This 500 bed hospital is a medical college hospital for TMSS Medical College. It has its community service all over the northern region of Bangladesh and patients comes to this hospital from 52 sub-clinics of different parts of northern region of Bangladesh by the free Shuttle Bus service from Rafatullah Community Hospital. The sub-clinics were selected by simple randomization and patients were selected by incidental/accidental sampling technique. Data were collected by interviewing the patients through semi-structured questionnaire and the diagnosis was confirmed by proper ocular examinations and relative investigations.

Results: Among 377 patients 101 (26.8%) were male and 276 (73.2%) were female. Safe ocular hygienic practices among the patient were poor. 51.1% of the patients were using polluted water like pond and river water for the cleaning the face and hands. 74.3% patients mentioned, they use any kind of water to clean their eyes, 79.8% patients said they uses any cloth to wipe their eyes after cleaning. The common infective ocular diseases were dacryocystitis (n=22, 5.8%) and bacterial conjunctivitis (n=12, 3.4%).

Conclusion: The study revealed there was association between the personal ocular hygienic practices and development of infective ocular disease ($p<0.01$).

Introduction:

Ocular health problems are one of the major public health issue in the world across the developed and developing countries. According to the Bangladesh Blindness Profile⁴ over 750,000 blind in Bangladesh among them 80% due to cataract and over 6 million need vision correction by spectacles & other means. To meet this national problem, the National Eye Care project Vision 2020 was launched in the year 2000 by Director General of Health Services of Bangladesh. There are many NGO in Bangladesh are working on blindness prevention like Grameen Bank, Sight Savers etc. TMSS is the 3rd largest NGO in Bangladesh. Among the many projects it has also primary and tertiary health care programs. Illiteracy rate in Bangladesh is high and common infective diseases are due to lack of knowledge and personal hygienic practices. Through proper health education we can prevent the incidences of infective diseases. This research will be helping to identify the common ocular health problem in this region of the Bangladesh and can address those problems, make specific plans and action regarding those health issues.

Methods:

An analytic cross-sectional study was conducted to assess and determine the ocular disease pattern at Rafatullah Community Hospital (RCH), Bogra, Bangladesh. There are 52 sub-clinics of RCH in the different areas of North Bengal, from where patient comes to RCH for their health related problems. For this reason the researcher selected the sub-clinics/sites by simple randomized sampling method and respondents were selected by using

accidental/incidental sampling technique. The selected sub-centers or sub-clinics were Naogan, Adamdighi, Dupchachia, Altaf Nagar, Durgapur, Sukanpukur, Kutubpur, Hatfulbari, Gabtoli, Golabari, Mazhira, Kalai, Mokamtola, Sirhotti, Pirob, Punot, Madla Singra, Nandigram, Gohail, Malancha, Khetlal, Molamgari, Dhaperhat, Palashbari, Kamarpur, Mahimagang, Fasitola and Godarpara. These sub-clinics include Bogra, Joypurhat and Gaibanda, the three major districts of Northern Region of Bangladesh.

The data were collected from the semi-structured questionnaires and also from Outpatient Register Book of the EYE OPD. Patient with same registration number and name was excluded from the study (follow-up cases) to avoid duplication of data. An Information Sheet for the participant which was translated in Bangla of each participant in this study. After understanding of this research study the participants were provided a written consent in taking part in the study. The participants were assured of the confidentiality, and anonymity during the study was maintained. Collected data were managed and analyzed by using SPSS. The association between independent variables and dependent variables were analyzed by using Chi-square test and odds ratio.

Results:

The mean age of the patients was 43.94 with SD ± 17.39 . The largest number of patients indicated their age as between 31 and 40 years 94 (24.9%). The second largest group was the 41-50 age group, with 78 (20.7%). Regarding gender of the patients seeking

ocular health care, the majority of the patients (n = 276, 73.2%) indicated their gender as female and (n=101, 26.8%) reported their gender as male. The forth variable on which the subjects were described was religion. The majority of the patient of the study participants reported their religion as "Islam" (n = 366, 97.1%) and the rest as "Hindu" (n = 11, 2.9%). Regarding the highest level of education completed by the patients, the largest group (n = 204, 54.1%) reported completion of primary or elementary level of education only. The second largest group (n = 94, 24.9%) reported as completed the high-school level of education. Among the rest 35 (9.3%) patients were totally illiterate and also 35 (9.3%) patient completed College level of education, 8 (2.1%) completed the under-graduate level and only 1 (0.3%) completed the graduate level of education. The common infective ocular diseases were dacryocystitis (n=22, 5.8%) and bacterial conjunctivitis (n=12, 3.4%).

The study questionnaire contains the queries regarding the personal ocular hygienic practices among the patients. Question 1 was, what type of water usually the patients use to clean their face, hands and for shower. 157 (41.6%) patients said the use pond water for this purpose and 136 (36.1%) patients said they use tube-well water. Table – I illustrates the use of different type of water for cleaning face and hands and shower. Question 2 was, how do they usually clean their eyes. 280 (74.3%) patients said they use any kind of water for cleaning their eyes, 58 (15.4%) patients said they use only clean water for this purpose and 39 (10.5%) patients said they use clean

water and soap for this purpose. Table – II illustrates the how the patient's clean their eyes. Question 3 was regarding how the patients usually use to wipe their eyes. In response to this 310 (79.8%) respondents said they use any cloth for wiping their eyes, 44 (11.4%) respondents said they use any clean cloth or towel and 32 (8.5%) respondents said they use their personal clean towel to wipe their eyes. Table –III illustrates the usual method of wiping eyes after cleaning. Last question in regards to personal ocular hygiene was what they usually do if their eyes were itchy. 292 (77.5) respondents said they use any cloth to wipe their eyes if it were itchy, 59 (15.6%) respondents said they use finger and hands to rub eyes if it were itchy and 24 (6.4%) respondents said they use clean cloth to wipe eyes if it were itchy. Table – IV illustrates the respondents answer to question reading what they do if their eyes were itchy.

Discussion:

Among infective cases were Dacryocystitis (n = 22, 5.8%) among them 4(18.2%) male and 18(81.8%) female patients. A study carried out in Dhaka Medical College Hospital showed there were 17.9% of the attending patients were suffering from Dacryocystitis³ and the study at Chakwal District showed 1% patients were suffering from Dacryocystis.¹ Bacterial Conjunctivitis (n=10, 3.6%), Corneal Ulcer (n=6, 2.2%) are of clinical importance as well as of public health importance, as these can cause blindness. There were no prevalence studies on Bacterial Conjunctivitis or Corneal Ulcer or Bangladesh. However, the study at Chakwal District, Pakistan showed there was 3.5% prevalence rate of Bacterial Conjunctivitis.³ The statistics of the study is similar with the present study.

The study was to find out the association between the ocular hygienic practices and ocular diseases. After using the Chi-square through SPSS-16, it was found that there were association between the ocular hygiene and ocular diseases in each domain of healthy ocular hygienic practices. There was direct association between the type of water the patients were using and the ocular diseases especially bacterial conjunctivitis ($X^2 = 10.940, p < 0.01$) and dacryocystitis ($X^2 = 19.813, p < 0.01$). Table V and VII illustrates the association between the polluted water and infective ocular disease (bacterial conjunctivitis & dacryocystitis). There was also association between the way the patient clean & wipe the eyes and the ocular diseases ($X^2 = 4.427, p < 0.05$ & $X^2 = 5.327, p < 0.05$). Table VII & VIII illustrates the association between using of dirty clothes for wiping eyes and infective ocular diseases (bacterial conjunctivitis & dacryocystitis). The International Scientific Forum on Home Hygiene state in one of their report that spreading of ocular infections is partially responsible on hand-washing practices.⁴

Table – I: Use of type of water for cleaning face and hands by the patients (N=377)

Type of water	Frequency of usage	Percent
Tube-well	136	36.1
Deep-well	39	10.3
Wasa (supply water)	9	2.4
Pond water	157	41.6
River water	36	9.5
Total	377	100.0

Table – II: Method of cleaning eyes by the patients (N=377)

Method of Cleaning	Frequency	Percent
Clean water and soap	39	10.3
Only clean water	58	15.4
Any water	280	74.3
Total	377	100.0

Table – III: Method of wiping eyes by the patients (N=377)

Method of Cleaning	Frequency	Percent
Any clean cloth or towel	44	11.7
personal clean cloth and towel	32	8.5
any cloth	301	79.8
Total	377	100.0

Table – IV: What patients usually do if their eyes are itchy? (N = 377)

Type of water	Frequency of usage	Percent
rub with finger or hand	59	15.6
With clean cloth	24	6.4
any cloth	292	77.5
Others	2	.5
Total	377	100.0

Table V : Association between Bacterial conjunctivitis and using of polluted water (N=377).

		Usage of Polluted Water		X^2	<i>p</i> -value
		YES	NO		
Bacterial Conjunctivitis	YES	12	0	10.940	0.01
	NO	195	169		
Total		208	169		

Table VI : Association between Dacryocystitis and using of polluted water (N=377)

		Usage of Polluted Water		X^2	<i>p</i> -value
		YES	NO		
Dacryocystitis	YES	22	0	19.813	0.01
	NO	182	173		
Total		204	173		

Table VII : Association between Bacterial Conjunctivitis and using dirty cloths for wiping eyes. (N=377)

		Usage of dirty cloth for wiping eyes		X^2	<i>p</i> -value
		YES	NO		
Bacterial Conjunctivitis	YES	13	0	5.794	0.05
	NO	290	74		
Total		303	74		

Table VIII : Association between Dacryocystitis and using dirty cloths for wiping eyes. (N=377)

		Usage of dirty cloth for wiping eyes		X^2	<i>p</i> -value
		YES	NO		
Dacryocystitis	YES	22	0	5.327	0.05
	NO	285	70		
Total		307	70		

REFERENCES:

1. Arif Hussain, Haroon Awan, Prof. Mohammed Daud Khan. Prevalence of non-vision-impairing conditions in a village in Chakwal district, Punjab, Pakistan. *Ophthalmic Epidemiology* – 2004; 11(5): 407–420. [Cited on 2004, August 10].
2. The Summary Report of the Bangladesh National Blindness & Low Vision Survey (30 & above age group), May 2003.4
3. Murad MAU, Basory R, Chowdhury FI. Bilateral dacryocystectomy in one sitting is convenient then in two sitting : A retrospective study. *The ORION Medical Journal* [Internet] Jan 2007;26:438-439. Available from:
4. Professor Sally F. Bloomfield, Professor Martin Exner, Professor Gaetano M Fara, Professor Kumar Jyoti Nath, Dr Elizabeth A Scott, Carolien Van der Voorden, A Global Burden of hygiene-related diseases in relation to the home and community, A Report Celebrating 10 Years of The International Scientific Forum on Home Hygiene, June 2009.