July 2018

Mid Term Evaluation of "Building Gender Equitable Eye Health Systems in Barisal Division" Project

Submitted To

The Fred Hollows Foundation

The Fred Hollows Foundation

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ResInt Bangladesh

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ResInt Canada

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Note: Most of the pictures used in this report are taken by ResInt field team with permission. Few were taken from FHF websites and other free websites.

ACRONYMS

AAO	American Academy of Ophthalmology
AOP	Association of Optometrists
BDT	Bangladesh Taka (currency)
DCR	Dacryocystorhinostomy
DEFF	Design Effect
FGD	Focus Group Discussion
FHF	Fred Hollows Foundation
FWA	Family Welfare Assistant
GoB	Government of Bangladesh
HH	Household
KAP	Knowledge, Attitude, and Practice
KII	Key Informant's Interview
MIS	Management information system
MO	Medical Officer
NGO	Non-Government Organization
OPD	Out Patient Department
PEC	Primary Eye Care
RE	Refractive Error
SACMO	Sub-Assistant Community Medical Officers
SBMC	Sher-e-Bangla Medical College
SDG	Sustainable development goals
SiB	Seeing is Believing
SPSS	Statistical Package for the Social Sciences
ToR	Terms of Reference
UHC	Universal Health Coverage
URE	Uncorrected refractive error

ACKNOWLEDGEMENT

With deepest gratitude we wish to thank The Fred Hollows Foundation (FHF) Bangladesh to initiate this important study not only to evaluate but to know how to improve eye care facility among the marginalized people in Bangladesh. The Fred Hollows Foundation, through Standard Chartered Bank's flagship project 'Seeing is Believing' (SiB) has implemented 'Building Gender Equitable Eye Health Systems in Barisal Division' project with the objective to bring down gender disparity in eye care, especially cataract services through health systems improvement approach.

We would like to acknowledge the following people for generously sharing their wisdom in fine tuning the study design, questionnaire and the report.

- Dr. Zareen Khair, Country Manager, The Fred Hollows Foundation
- Mohammed Zahidur Rahman – Senior Program Manager, The Fred Hollows Foundation
- Rizwana Hussain -Program Manager, The Fred Hollows Foundation
- Sakib Rashid- Project Officer, The Fred Hollows Foundation

The ResInt research team would like to sincerely thank all the people and organizations that supported the development of the SiB project - 2018.

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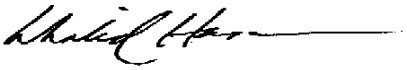
Finally, we are grateful to all the respondents and stakeholders living in Barisal district for providing with all their valuable information, otherwise we would not be able to be here today with this informative report. Special thanks to them!

We aim to ensure The Fred Hollows Foundation and the team, the report stays relevant using data, analysis and evidence-based success stories that respond to the needs of your work, from decision-making to implementation, across the development landscape.



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EXECUTIVE SUMMARY

The Fred Hollows Foundation (FHF), through Standard Chartered Bank's flagship project 'Seeing is Believing' (SiB) has implemented 'Building Gender Equitable Eye Health Systems in Barisal Division' project with the objective to bring down gender disparity in eye care, especially cataract services through health systems improvement approach. A midterm study was carried out during May and June 2018, mainly to assess the project outcome since inception and to suggest corrective actions, if needed.

The evaluation study has covered five districts of Barisal Division - Barisal, Pirojpur, Bhola, Patuakhali and Jhalokathi. The study used a mixed method of survey and FGDs (Focused Group Discussions) among 471 project beneficiary men and women, KIIs (Key Informant's Interviews) among service providers, ophthalmologists, local government representatives, community leaders, and FHF staff. In addition, there were case studies, observation and review of project documents.

KEY FINDINGS

Increased awareness of major eye diseases

The project has achieved commendable success in enhancing awareness of common eye health problems, which was at a much lower level at project initiation. Now, more than 80% of project beneficiaries are aware of two major diseases – cataract, and refractive error.

Name of eye diseases	% Baseline (n=3427)	% Midterm (n=471)
Cataract	16.5	88.7***[1]
Refractive Error (RE)	56.6	81.7
Eye Allergy	6.1	52.7***
Chronic Dacryocystitis	14.3	36.3***
Accidental eye injury	3.7	32.7***
Eye Cancer	0.1	18.5***
Diabetic Retinopathy	0.8	10.2
Corneal Scarring	0.0	7.4
Glaucoma	1.1	3.8

(* Statistically significant)**

Improved knowledge on common eye health problems

Highest level of knowledge is evident for refractive errors, which had been fairly high at baseline (56.6%) and has since marginally increased (60.9%). The project has attained significant success in increasing knowledge on some other major eye health problems manifold. Knowledge on cataract has gone up from 16.5% to 88.7%, for refractive error from 56.6% to 81.7% and eye allergy from 6.1% to 52.7%, Knowledge on other eye diseases, however, remains low.

The study investigated further on two most common eye diseases – refractive error, and cataract. On cataract, 50% of respondents described it as a clouding lens inside the eye and another 43% regarded blurred eye as a symptom of the disease.

Regarding refractive error, respondents reported blurred vision, and difficulty seeing from a distance as the two major symptoms.

[1] *In principle, a **statistically significant** result (usually a **difference**) is a result that's not attributed to chance. More technically, it means that if the Null Hypothesis is true (which means there really is no **difference**), there's a low probability of getting a result that large or larger.*

In all locations except Jhalokathi very high level of knowledge was noticed that without early and proper treatment of an eye disease, one may go completely blind. Now, most of the beneficiaries believe that onset of blindness can be averted by eating nutritious food. Two preventive measures in this regard have registered very well among the respondents: early treatment and regular eye care.

Increased awareness of eye care facilities

Now, the beneficiaries are far more aware of various eye care facilities - public hospital (baseline 42.5%, midterm 84%), and private hospital/clinic (baseline 34.6%, midterm 78.1%) are more commonly known. Awareness of NGO clinic (23%) is also much higher now. The project has initiated eye camp facilities. At midterm review, 23% of respondents are aware of such facilities. While in Barisal such awareness is very high (68%), other districts lag way behind. Only 5% of respondents were found to be aware about eye screening program for children.

Increased demand for eye care

Eye care seeking behavior has nearly doubled from 38% at baseline to 63% now to have visited an eye care facility for treatment. Sixty six percent of those aware of eye camps operated by FHF attended such camps - more of aware women (73%) than aware men (60%) have done so. Eye camps have provided free medicines (reported by 58% of respondents); nearly a third of the participants followed up with surgery.

Improved eye care seeking behavior

Around 42% of respondents informed that one of their family members had undergone cataract surgery. An overwhelming 94% of respondent considered patients' wiliness as the main influential factor in this regard.

Gender parity

Gender parity is evident in all forms of service and facility provisions. Female patients seem to have enjoyed almost equal facilities as compared to their male counterparts in terms of washroom facility, privacy, treatment facility, listening to patient, behaviour, and time spent by doctors.

Eye care challenges

Patient satisfaction with eye care services is at a moderate level in terms of promptness, cost (of treatment), availability of skilled doctor, waiting time and availability of proper equipment the mean score hover around 3.0 on a 5-point scale.

While a high proportion of cataract surgery was reported, barriers to uptake cataract treatment include negligence from the family/ self, insufficient fund and lack of support/companion. Also, all these factors are more applicable to women. However, such barriers are found to be less as compared to baseline.

Regarding the affordable cost, average cost of a cataract surgery is estimated at around BDT 7,652 (USD $95). Around 18% of the respondents reported that their family can afford only about BDT 1,000 – BDT 2,000 (USD $13 -$25), followed by 15% (BDT 2,000 – BDT 3,000) and 11% (BDT 4,000 – BDT 5,000).

During the study, dropout rate of female is comparatively higher than male across all public partner hospital. One of the main reasons is the transportation and companion along with cost. FHF supported transportation as well as 50% cost of cataract surgery. Lack of knowledge of this facility under this project is the main reason to drop out.

The qualitative investigation revealed that most of the village people who are very poor and lack awareness on health care and are the available facilities, and do not visit hospitals or eye care centers on time to take proper treatment and cannot restore their vision. The barriers to obtain eye care facilities can be broadly categorized in three types. Firstly, beneficiary side myths and misconception

fear of stigma fear of loss of work days for hospitalization etc. Gender disparity, and more importantly considering men more important due to their earning ability helps prioritize male treatment. Secondly, provider side barrier in terms of ophthalmologists being mostly male deters many women from seeking treatment from them. Thirdly, women face the barrier at the community level. In some cases, some people don't follow the doctor's instructions after surgery cannot get full benefit of treatment. Most of the cases due to lack of transportation, and opportunity cost lead to drop out of female patients.

Project outcome based on stakeholder views

Ophthalmologists (those interviewed) cited the available facility of eye health services at the hospital that the hospital has been extending services of both outreach and indoor patients for the treatment of all types of eye complications and diseases. According to them, women in most cases suffer from corneal scarring (*Netranali* Problem) and diabetics related eye complications, while cataract and allergic problems are mainly found among men. They also reported that nearly 70% of their patients are women. Yet, women were considered to be more vulnerable to various eye diseases – they have less scope to come to the hospital due to prevailing gender disparity. Patient information, especially those of women, is always kept confidential. Delaying visit is common among female patients, and in worst cases, some don't even seek treatment. Poverty, gender disparity, and lack of awareness were attributed to these phenomena.

The GoB hospitals provide treatments of all kinds of eye diseases to the patients free of costs, including cataract and other surgical treatment with special attention to the female and child patients. Eye camps and any such outreach programs were highly appreciated. They noted that various kinds of banners, festoons, placard, charts etc. with various messages and learning information relating to eye health care are displayed in the outreach programs. Multimedia is also used in many cases as part of awareness building communication among the community people.

"The Building Gender Equitable Eye Care System in Barisal Division" project undertaken by FHF has been extending financial and technical support to the hospitals and other institutions related to eye health care and treatments in Barisal Division with valuable machineries and equipment and technical personnel to help overall development of eye health care in this part of the country. Free treatment and surgery to the eye patient have been possible only for overall contribution and support from FHF through this project.

Human resources capacity

There is adequate number of eye surgeons at districts level. Around 900 of the doctors are the clinical ophthalmologists, of them, 50% can perform cataract surgery as well as received training. Unfortunately, few of the district hospitals have no ophthalmologist - making them merely a referral center. Thus, most of the public-sector health facilities remain unutilized or underutilized. Most of these facilities, particularly the public ones, there are women-friendly amenities in terms of having provisions of a separate queue, washroom, breastfeeding arrangements etc.

It was also noted that the productivity of the existing ophthalmologists is negatively affected by lack of adequate number of ophthalmic nurses and paramedics. Facilities at all levels have adequate ophthalmic equipment and supplies, and often, a good number of available equipment remains functional. In other words, a majority of the eye care patients now rely on private eye facilities. As far as the cataract surgery is concerned, private facilities are by far the biggest providers though government facilities are widely used for basic eye care services especially by the women and poor communities. Doctors and service providers are given various training related to the friendly atmosphere and gender-focused. FHF feels there are lots of skilled human resources, and increasing human resources is not necessarily warranted. Motivation is considered the key to their performance.

Impact of Health Systems Strengthening Approach to Improve the Quality of Eye Care Services in Barisal

FHF are directly involved with the government stakeholders. FHF identifies the hospitals where ophthalmologists are not available, and they advocate with the GoB to provide a doctor at that hospital. They also try to find out to relate the doctors with the projects by providing training on regular basis. Training is not limited to eye care but extends to the management system. FHF renovated all the surgical and treatment equipment. Training is provided to the doctors (OPD management) as well as nurses (OT management). They finalize MIS report on the regular basis. Once, all these steps are completed, FHF finally go to community level with their services. By using the MIS report, FHF identifies the dropout and takes necessary action. Accountability is the key point in this regard. FHF staffs attended training with ophthalmologist in Nepal. A part of the workshop was basic understanding of Gender and how it is related to the work FHF do. Also, FHF designed a few groups work with the doctors and SACMOs following the ones FHF did in Nepal. After exercising with different tools, FHF highlights the gender disparity in the aspect of this project and formulate an action plan with everyone's participation.

SUMMARY FINDINGS (%)			
Progress Indicators	**Indicators**	**Baseline**	**Mid term**
Measure the progress, outcome and the achievement of the project in terms of expected results			
Building awareness in terms of knowledge of symptom and treatment	Cataract	16.5	88.7***
	Refractive Error	56.6	81.7
	Eye Allergy	6.1	52.7***
	Chronic Dacryocystitis	14.3	36.3***
	Accidental eye injury	3.7	32.7***
	Eye Cancer	0.1	18.5***
	Diabetic Retinopathy	0.8	10.2
	Corneal Scarring	-	7.4
	Glaucoma	1.1	3.8
Knowledge of eye problem	Refractive Error	56.6	60.9
	Cataract	16.3	47.7***
	Glaucoma	1.1	37.6***
Knowledge about preventative measures against blindness	If eye problem not treated in time you might go blind	45	99***
	Some eye problem can be prevented	37	85***
	Curative care is available	33	82***
Knowledge of eye camp	Public hospital	42.5	**84.1*** **
	Private hospital/ Clinic	34.6	**78.1*** **
Knowledge of eye camp	NGO hospital/ Clinic	6.4	**22.5*** **
	Outreach camp	5.6	**20.4*** **
	Private practitioner	10.1	11.0
Knowledge of eye camp	Awareness	17	77***
	Activities	11	65***
Knowledge of school screening	Awareness	-	5
Cataract treatment services and refractive error			
Knowledge about measures of treatment	Cataract	42	86***
	Refractive error	66	75

Identify barriers facing women in accessing eye care services in Barisal Division					
Poverty is a major barrier in uptake of eye care services		77		65	
Distance is often a bid barrier to eye health uptakes in Barisal districts		83		53	
Negligence (both by patient and his/her family together) is the most dominant barrier		92		42	
Patients' interest, support from family, availability of money are main contributing factors behind undertaking treatment of cataract.		82		48	
Increase capacity in human resources for eye health in Barisal division to deliver high quality, accessible, and equitable eye health services					
Number of eye care workers trained in cataract surgery		-		**Total – 5** (male 5, Female – 0)	
Number of other mid-level eye care workers trained clinically		-		**Total 160** (M - 128 , F– 32	
Progress Indicators	**Indicators**	**Baseline**		**Mid term**	
		Pre surgery	**Post surgery**	**Pre surgery**	**Post surgery**
VA Status (in percentage)	Normal vision (6/3.8-6/7.5)	**0**	17	0	15
	Near Normal vision (6/9-6/18)	**0**	69	0	60
	Near Blindness (< 6/60)	**93**	1	95	2
	Low Vision (6/24 - 6/60)	**7**	13	5	22
	Grand Total (Base)	**1784**		**1831**	
Progress Indicators		**Baseline**		**Mid term**	
Increase demand and provide eye care services in Barisal Division					
Cataract surgery performed		**Baseline**		**Midterm (till May 2018)**	
>=50		1652 (F=760, M =892		1664 (F=886, M =768	
0 to 14		3 (F=2, M=1)		0	
15 to 49		131 (F=93, M=38)		167 (F=109, M=58)	
Grand Total		1786		1831	
Dropout Analysis					
CAT Identified by private partners		**3089 (F =329, M =1764)**		**2772 (F =1513,M=1259)**	
CAT surgery performed by private partners		**1786 (F=855, M=931)**		**1831 (F=1005, M=826)**	
Dropout		**Female =36% Male = 47%**		**Female =34% Male = 34%**	
Improve eye care services in Barisal through health systems strengthening					
Overall perception of the quality of services availed from Nizam- Hasina/Islamia institution		3.1 (Good)		Mean score 3.9 (Good)	
Perception of the quality of the service providers at Nizam- Hasina/ Islamia eye care facilities		2.9 (better)		Mean score 3.8 (Good)	
Frequency of visiting eye health care services		138 days (since the last visit)		Average 59 days (since the last visit)	

*(*** statistically significant)*

RECOMMENDATION

- Organize more awareness building communications strategy and facilitate the services to all segments of population and extend access to poor/ vulnerable patients at private hospitals and clinics free of cost or at lower cost.
- Increase wash and toilet facilities, separate seating arrangement for female patients with breast feeding facilities.
- Ensure better treatment and facilities at private clinics and hospitals at reasonable costs, to be guided by government health policy.
- Local community leaders could be involved in these activities as social responsibility to help vulnerable people for ensuring right to health care.
- Develop gender training curriculum for all providers and cascade it for all facility providers, community level providers and community leaders. Gender sensitization orientation may cover issues like privacy, women friendly services; follow up instructions and dos and don'ts.
- Organize more outreach camp for the public facilities.
    - Conduct preparatory meeting with all civil surgeons and senior eye consultants of each district hospital
    - Organize special eye camps for women on different occasions
- Distribution of communications materials as leaflet to all patients especially to women and their accompanying person to ensure proper post-operative care to them at household level all as health awareness among them need improvement
- Increase the support of transportation cost for the female patients.
- Introduce regular follow up and monitoring system to minimize the drop-out rate of female patients.

CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION

Undoubtedly Bangladesh has undergone profound social changes in many areas, many of which have impacted gender inequality, such as fertility rates have reduced, gender gap in infant mortality and primary and secondary schooling has been narrowed, and large numbers of young women are leaving their villages to work in garment factories. Gender equitable distribution is improving in the areas of educational attainment, health and survival, economic participation and political empowerment. However, even in those areas where progress has been made, challenges and disparity still exit. Gender disparity is still a common phenomenon in Bangladesh. The social structure is dominated by patriarchal values and characters. Poorer to mid-income women still lack adequate access to reproductive health, and enrollment in higher education is low, compared to their male counterparts. Women employments levels remain low, even in terms of their role, payment rate etc. (Khan 2008).

Like other districts in Bangladesh, Barisal is no difference as such. Due to the gender gaps in the society, less number of women in this district is economically active which hinders taking major decisions independently and defending the rights of women. It is a common social norm for the women to be escorted by a husband or another female or someone else to seek health services. It does not only make her dependent but also increases the cost of her health seeking behavior and practices.

The Fred Hollows Foundation (FHF)

The Fred Hollows Foundation (FHF), a nonprofit organization based in Australia, was founded in 1992 by an eminent eye surgeon Professor Fred Hollows. The Foundation focuses on treatment and prevention of avoidable blindness and it also tackles other causes of blindness including trachoma and refractive error particularly for extreme poor, women and indigenous people.

According to baseline report of The Fred Hollows Foundation (FHF) conducted in 2016, there has been widespread eye health problem in Barisal. Women are the worst sufferers of eye diseases. The prevalence rate among women and men was 15.3% and 11.4% respectively. The study also mentioned that about 2.1% of the population in Barisal suffers from cataract, 51.5% of whom are women. Similarly, 70% of chronic Dacryocystitis and 55% of refractive errors were reported by women. Diseases that lead to blindness like Glaucoma, Corneal Scarring, and Diabetic Retinopathy etc. are more common among women than men.

The study also shows that non-treatment, maltreatment and late treatment are most prevalent issues and problems among the poorer community especially the women. More than 33% of female eye patients remain untreated, 19% receive treatment from pharmacists and other unrecognized providers as against their male counterparts; 14% were untreated and 48% received treatment from a general physician or ophthalmologist.

Only 57% of the female patients finally consult with an ophthalmologist after many visits to other sources causing serious delay in receiving proper and timely treatment. The eye health service uptake among female and male are 58% and 60% respectively.

Therefore, a mid-term evaluation study on the program of "Building Gender Equitable Eye Health Systems in Barisal Division" was planned to conduct to have a better understanding the outcomes of the program activities in the respective districts during the past months.

1.2 STUDY OBJECTIVES

The purpose of the mid-term evaluation project was to measure whether and to what extent the program that has been established progressively over time is successful in optimizing the use of limited resources to improve eye healthcare services to communities in remote areas.

The objectives of the mid-term were to:

- Measure the progress, outcome and the achievement of the project in terms of expected results;
- The extent to which programme activities have so far contributed towards the achievement of desired outcomes (in comparison with the expected and baseline KAP analysis);
- Draw out and document key lessons learnt as well as to provide a set of recommendations on the strategic direction of the programme.

1.3 INFORMATION AREA

The mid-term evaluation study was considered the existing indicator framework, desired outcomes, and baseline KAP findings; however, it focused on the following information areas and the issues related to:

- Status of the health-seeking behavior of women with a focus on cataract and accessibility, availability, affordability, and acceptability behind the low uptake of eye care services.
- The relevance, efficiency, impact, sustainability, timeliness of implementation etc.
- Assessment based on and comparison with a baseline survey with sector-specific disaggregated data, clear objectives and measurable indicators.
- Quality of project activities i.e. KAP building, social & behaviour change communication (SBCC) which will be covered through progress monitoring.
- Efficacy of communication campaign, an efficacy of school screening, cascade training, and the gender strategy.
- Project progress against gender indicators and a gender-focused patient satisfaction survey.

1.4 STUDY LIMITATION

The study was designed specifically to understand the services of gender equitable eye health systems. Interestingly, majority of the people are aware of eye health care and were willing to respond. However, there were some non-responses, because many of the respondents were either traveling or occupied with business issues. All these non-responses (around 5%) were addressed by frequent visits to more number of respondents to reach the final estimated sample size. It can be assured that the findings are representative and well addressed so that proper and adequate decisions can be taken without any hesitation.

CHAPTER 2: METHODOLOGY & IMPLEMENTATION

2.1 STUDY METHODOLOGY

A mixed method (of both quantitative and qualitative) was used to conduct this study among the target group to understand the status of eye health systems services offered to the target beneficiaries. Qualitative research includes FGDs, KII, and observations.

Target Respondents

Given the dynamics of health and related issues, women are the key target respondent of the planned study. However, in rural areas with known issues of gender, patriarchy, social practices, and norms, their (women) behavior is influenced, and dictated on one hand by her knowledge, prejudices and societal norms, and on the other hand by their mothers-in-law, husbands, children and adolescents, and immediate circle of relatives, neighbours, and influential people.

The respondents of the study were as follows:

Primary Respondents

- Female (women focused program)
- Male (maybe husbands of the above women or any adult men)

(Picture taken with permission)

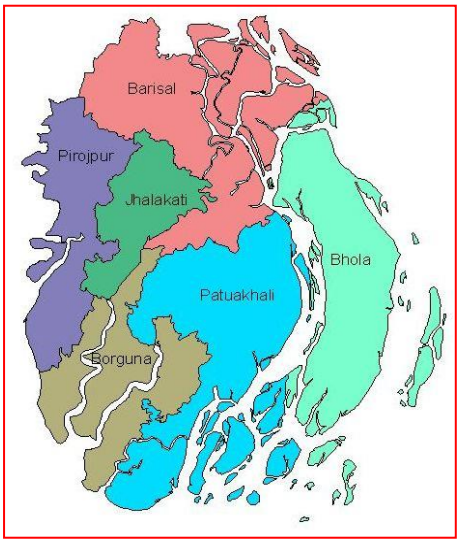
- Existing clients who have received services from the programme (both male & female)
- Potential clients/community people comprised of female and male who have never suffered from eye health problems but have the risk of it
- Service providers i.e. ophthalmologists, hospital managers, clinical staff from the available eye care facilities in programme areas
- Relevant stakeholders of the project i.e. local government representative (Chairman of a union, upazila), community leaders (such as imam of mosques) etc.
- FHF team at the local and national level as well as partner staff involved with implementing the process.

Study Areas

The Fred Hollows Foundation Bangladesh, as part of the "Seeing in Believing" Phase V initiative, is implementing a four-year project titled 'Building Gender Equitable Eye Health Systems in Barisal Division' through Public-Private Partnership.

As per the TOR, the project has been implementing in 5 districts of Barisal Division. Therefore, mid-term evaluation was conducted in the following districts:

1. Barisal
2. Pirojpur
3. Bhola
4. Patuakhali and
5. Jhalokathi



Study Techniques

The study utilized both quantitative and qualitative techniques. Study approach was as follows: - Quantitative: Survey - Qualitative: FGDs (Focused Group Discussions), KIIs (Key Informant's Interviews), Observation.

For the survey, face to face interview was used with structured and semi-structured questionnaires. The questionnaire survey was conducted among the primary target population – project beneficiaries – women and men. As 2.1% of the population in Barisal suffer from cataract and 51.5% of whom are women, ResInt has used the following formula to have a representative sample and to capture all the target indicators.

$$n = \frac{Z^2 pq}{e^2} \times Deff$$

p = Expected value of the indicator= 50%
q = (1- p)
e = Margin of error = 5%
Deff = Design effect =1.2
Z-score = 1.96 at standard of 95% confidence interval

Thus, with the above assumptions, the required sample size for the research worked out to be 471 respondents to be surveyed in the mentioned 5 districts under Barisal division. Since the majority of women suffer from cataract, the female and male distribution was roughly 52:48. The number of samples was distributed among 5 districts proportionately, based on the prevalence of suffering from cataract.

Respondents	Barisal	Bhola	Jhalokhati	Pirojpur	Potuakhali	Total
Female	49	49	46	59	43	246
Male	45	45	49	35	51	225
Total	94	94	95	94	94	471

Quantitative Sampling Selection Procedure

Following was the sample selection procedure of the study:

- Five districts were covered in this mid-term evaluation.
- FHF provided the list of clients or MIS data who received eye cares across the study areas.
- From the list, the target respondents were selected randomly.
- Target respondents were selected from rural & urban areas.
- The proportion of the sample was distributed among the selected category of women and men from each of the rural and urban area.
- A subsample of patients was adopted in consultation with FHF to conduct a gender-focused patient satisfaction survey. In that case, a snowball sampling technique was used to reach the required number of patients.

In addition to the survey, for qualitative research, there were FGDs, KIIs, and Case Study documentation. A sample of the qualitative part was selected purposively from each of the targeted audience. The qualitative samples were independent of the quantitative survey, not sub-samples of the survey.

Qualitative Sample Selection Procedure

Participants for the FGDs were invited to participate in the discussion sessions considering homogeneity. FGD participants and KII respondents informed about the project objectives and their informed consent was taken before starting discussion or interview. All the respondents of the qualitative survey were selected based on their availability and willingness to participate in the survey.

Sample Distribution: At a Glance

Target Respondent/s	Area (5 Districts)		Sample
	Rural	Urban	
Quantitative			
Existing and potential clients- Women	120	120	246
Existing and potential Clients- Men	111	110	225
Total	**231**	**230**	**471**
Qualitative			
FGDs			
Community people- women	1	1	2
Community people- men	1	1	2
Total	**2**	**2**	**4**
KIIs			
Service providers i.e. ophthalmologists, hospital managers, clinical staff	-	-	3
Relevant stakeholders i.e. local government representative (Chairman of union parishad, upazila), community leaders etc.	-	-	5
FHF team at the local and national level as well as partner staff	-	-	2
Total			**10**
Case Study			
Who received eye care services from FHF	**3**	**2**	**5**

2.2 STUDY IMPLEMENTATION PLAN

Project Inception

Project Inception Meeting: After the awarded of the project, ResInt research team met with FHF team to discuss the details about the project, its sampling procedure, study locations, survey, draft questionnaires and FGD/KII guides, timeline, and other related issues.

Desk Review: ResInt collected necessary documents, records, previous studies, MIS data and literature relevant to the current assignment relevant.

Inception Report: ResInt submitted an Inception Report to FHF. The report included the final set of data collection tools, sampling plan, research methodology, methodology, key performance indicators, training plan, final report outline and agreed timeline.

2.3 FIELD WORK IMPLEMENTED

Data Collection: Team Selection, and Instruments Finalization

Recruitment of Field Staff: There were two teams for data collections, one for the survey (quantitative survey among women and men), and the other for the qualitative component (through FGDs, KIIs, and observation). The field manager in association with the field executives looked after the recruitment of female and male interviewers and supervisors for a quantitative survey. The recruitment was mostly made from the existing panel of supervisors and male and female interviewers. There was little fresh recruitment as well.

Instruments: ResInt developed the structured questionnaire in Bangla (and were translated into English), script, pilot test and get approved by the FHF team before the fieldwork. Researchers pre-tested the tools in the study areas before finalization to understand the flow of questions, consistency check, skip patterns, adding/dropping some questions etc. Pre-test observations were shared with FHF.
(Picture: ResInt team crossing the river)

Qualitative Discussions Recording & Transcripts: All discussions were recorded using digital audio recorders and were transcribed (verbatim) for content analysis.

2.4 TRAINING OF THE DATA COLLECTION TEAM

The training for the researchers and field team were held centrally in Dhaka (so that all the core team could align with the objective and expected the outcome of the study). The trainee was Field Investigators (FIs), Field Supervisors (FSs) and Quality Controller (QC). The Quality Assurance team was also in the training program. The research professionals were presented in the training sessions.

Mock calls and interviews practiced in the classroom before taking them to field for trial calls. The practical sessions helped FIs/FSs to have a clear understanding of each question in the questionnaire/tools. After evaluation of the performances, the successful FIs/FSs were selected for the project. The training duration was for 4 days. A representative from FHF was invited to attend the

session. Training manuals (for investigators and supervisors) was used after translating them in Bengali. *(Picture: The training session among the field team was conducted by ResInt Field Manager, in the following page.)*

Training Topics

- About the project, its objectives, purpose, and importance (by FHF representative)
- Subject knowledge on health/cataract, gender equity, marginalized population etc.
- Research methodology, sampling etc.
- Art of asking questions and managing the respondents (if required)
- A questionnaire, data collection, backcheck etc.
- Quality Control, Ethical issues
- Crisis management and motivational issues

2.5 QUANTITATIVE DATA MANAGEMENT

The data analyst/manager mainly looked after the data processing and analysis. The project coordinator and the team provided inputs at various stages of data processing and analysis in consultation with FHF.

Office Editing/Coding: Though field editing was done in the field, office editing of all the completed schedules were carried out by trained office editors as per the data entry program, which included coding of open-ended questions, identification details, and consistency checks, before starting the data entry process.

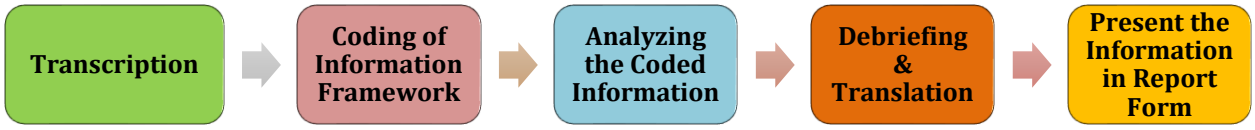
Data Entry: Data entry was carried out under the supervision of Analysis Manager. A FoxPro package was used for entering the data obtained from the field surveys. Further, it was converted to an SPSS file for analysis. Computer-based checks were done and based on the errors generated, inconsistencies were removed, and the base data were cleaned.

Data Analysis: The data analysis was carried out using SPSS as per the tabulation plan finalized in consultation with FHF.

2.6 QUALITATIVE DATA MANAGEMENT

Transcribe of the KII: Once the KII was done, the moderator and note-taker immediately completed a quick report covering the "fresh" impressions or observations during the discussion or interview so that it was not lapsed from the memory, before transcribing the audiotape. Further, the audiotapes of the discussions were transcribed by the professional transcribers. However, the moderators, as well as a qualitative researcher, verified the accuracy of the transcriptions before analysis.

Content analysis of qualitative data: This approach was used to interpret meaning from the content of text data and, hence, adhere to the naturalistic paradigm. The qualitative analysis process was done as per following flow-chart:



CHAPTER 3: OVERALL ACTIVITIES OF FRED HOLLOWS (2016 – May 2018)

During the midterm study, we have observed overall activities of Fred Hollows in Barisal Districts. ResInt research team has visited the hospital under program areas and did an experiential research over there. These activities are given in below:

3.1 IDENTIFY BARRIERS FACING WOMEN IN ACCESSING EYE CARE SERVICES IN BARISAL DIVISION

In 2016, FHF arranged a 3-day 'Gender Analysis Workshop' where participants were engaged in group work and identified gender barriers and mitigation strategies with regards to eye health care. Following this workshop, the FHF project staff, in consultation with a gender specialist, developed a comprehensive gender matrix with detailed task distribution. Later, a social communication agency developed communication messages for the target audience.

In 2017, a comprehensive Gender Strategy and Social Behavior Change Communication Strategy was developed with the assistance of a gender specialist. These strategies formulated some important recommendations to mitigate gender gap in receiving eye healthcare.

A pharmacy orientation program was conducted where 500 pharmacists were oriented on the primary eye care and referral system. Pharmacists were given a complete communication package and were encouraged to refer patients to nearby service providers. Another action was recommended to conduct one-on-one counseling sessions with drop out patients and their family members. The goal was to motivate female patients and their family members so that they continue the treatment and uptake surgery.

Gender-focused patient satisfaction surveys were designed, and it was conducted in the five district partner hospitals. The survey report shows that in most of the hospitals, women have less patient satisfaction compared to men, due to several gender barriers, such as discomfort in the waiting area, absence of infant nursing space and a lack of gender sensitivity from the staff.

However, FHF has taken some action plans in terms of gender initiatives. These are:

- FHF gender activity progress report, even more 'positive discrimination' methods may be needed e.g. providing transport costs for women - to ensure women complete the whole pathway, and they don't drop out half way through.

- Follow-up on strategy of orienting pharmacists on eye care to check to see if specific pharmacists are actually making the bulk of the referrals, or if the referrals are from across all pharmacists. Also check to see what the most common reasons are for referring women, alongside final diagnoses.

- To evaluate strategies, including pharmacists' training, to determine which strategies/staff are most effective in reaching women, and actually encouraging them to attend from these communities.

3.2 INCREASE CAPACITY IN HUMAN RESOURCES FOR EYE HEALTH IN BARISAL DIVISION TO DELIVER HIGH QUALITY, ACCESSIBLE AND EQUITABLE EYE HEALTH SERVICES

FHF workshop and training activities to introduce gender equitable and overcome the gaps

FHF has conducted a gender equitable service delivery workshop for the Medical Officers and Sub-Assistant Medical Officers from different sub-district under Barisal district. Service providers from NGO partners were also invited in the workshop.

The aim behind conducting the workshop was to arrange a participatory workshop to work together with the service providers closely to ensure a gender equitable service delivery to all the patients. The service providers were also assigned to work as a gender focal person in their respective facilities. In this training session, FHF facilitated the concerned government staff to identify gender gaps and issues in line with gender-focused service delivery. To evaluate the workshop, FHF conducted pre and post-tests, where 4 questions were asked; which include a) what you understand by gender? b) What is gender inequality? c) Mention 5 reasons behind gender discrimination in accessing eye health care. d) Mention 5 steps you can take to ease women's access to eye health care. (***Picture: The Fred Hollows Foundation)***

Workshop agenda covered primary eye care (PEC), basic concepts of gender, address gender issues in line with SDG, share key progress (as per MIS) under project supported public facilities and Identify the gaps, challenges and opportunities to address gender issues.

The inputs from the workshop and the scaled-up survey results also helped to design the future interventions and communication materials which addressed the identified gaps and challenges and how they could address the issues from their level. (***Picture: The Fred Hollows Foundation)***

According to FHF staff, the gender workshop in Nepal certainly helped in the designing these workshops. A part of the workshop was basic understanding of gender and how it is relating to the work and responsibilities of FHF.

At the end of the workshop, all the participants were provided a certificate for their active participation. (*Picture: The Fred Hollows Foundation)*

The table below refers the training and eye care facilitates in respective hospital:

Eye Care Facilities	Training		
	SICS training for Ophthalmologist	OT management training for nurse	OT, OPD management training for AOP
Sher- e- Bangla Medical College and Hospital	✓	✓	✓
Barisal Sadar Hospital	✓	✓	✓
Patuakhali Sadar Hospital	✓	✓	✓
JhalokathiSadar Hospital	✓	✓	✓
PirojpurSadar Hospital	✓	✓	✓
25 Upazillas	X (Referred)	X (Referred)	X (Referred)

Since, our field investigators have visited and observed the overall facilities to observe quality of treatment, services, use of equipment and other components and indicators that helps to measure the health facilities. The summary of the quality of overall eye facility are given in table below:

Hospital Name	Service Quality		
	High	Medium	Low
Sher e Bangla Medical College and Hospital			
Barisal Sadar Hospital			
Patuakhali Sadar Hospital			
JhalokathiSadar Hospital			
PirojpurSadar Hospital			

Details of training provided in different target people who are involved with the SiB project

According to secondary data provided by FHF, field observation and project activities, the summary of the workshop/training is prepared. It was found that till May 2018, FHF has done a remarkable approach toward improving the skills of eye care workers in cataract surgery, community and village health workers, health personnel in basic eye health (Nurses on OT management, MO/SACMO/MA on Basic eye screening), PEC and OPD management, and eye care workers in Primary Eye Care.

In different levels, FHF provided training among the MO, SACMO, MA introducing the activities of FHF as well as cataract surgery, OT management, basic eye screening, and also computers skills, management, and equipment maintenance. Total numbers of trainings provided in different categories are given below:

Year	Number of eye care workers trained in cataract surgery (SICS)					
	Age group 1 (0-14)		Age group 2 (15-49)		Age group 3 (50+)	
	FEMALE	**MALE**	**FEMALE**	**MALE**	**FEMALE**	**MALE**
2016	0	0	0	2	0	1
2017	0	0	0	2	0	0
2018	-	-	-	-	-	-

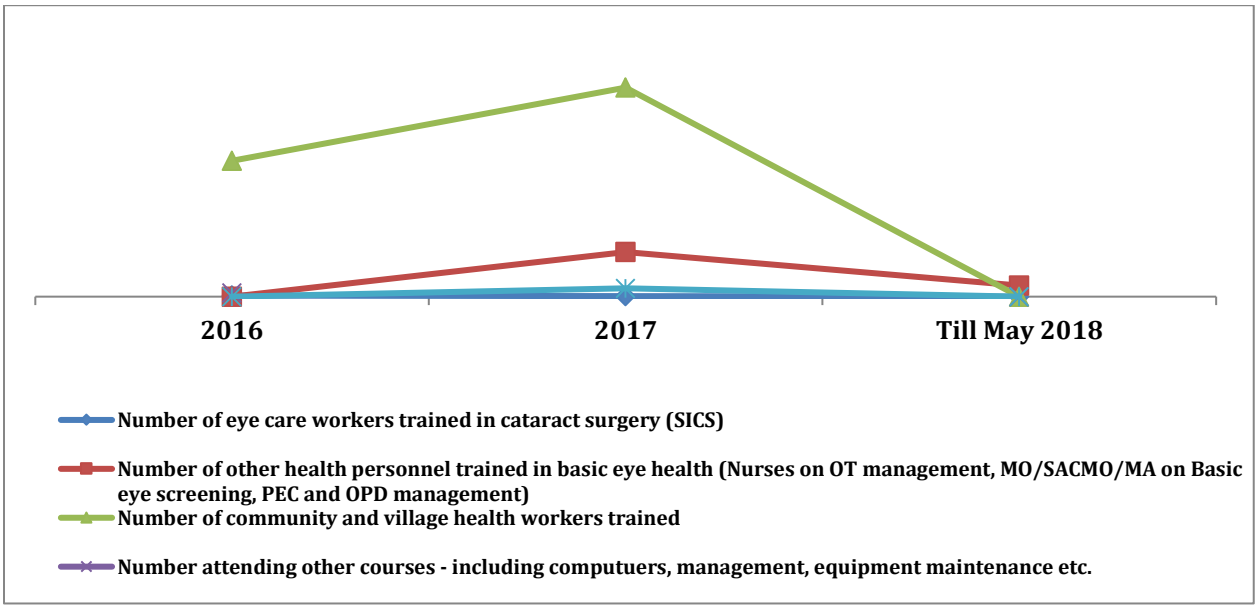
Year	Number of other health personnel trained in basic eye health (Nurses on OT management, MO/SACMO/MA on Basic eye screening, PEC and OPD management)					
	Age group 1 (0-14)		Age group 2 (15-49)		Age group 3 (50+)	
	FEMALE	**MALE**	**FEMALE**	**MALE**	**FEMALE**	**MALE**
2016	0	0	0	0	0	0
2017	0	0	41	2	78	7
2018	-	-	8	17	1	7

Year	Number of community and village health workers trained					
	Age group 1 (0-14)		Age group 2 (15-49)		Age group 3 (50+)	
	FEMALE	**MALE**	**FEMALE**	**MALE**	**FEMALE**	**MALE**
2016	0	0	129	117	77	67
2017	0	0	294	306	0	0
2018						

Year	Number attending other courses - including computers, management, equipment maintenance etc.					
	Age group 1 (0-14)		Age group 2 (15-49)		Age group 3 (50+)	
	FEMALE	**MALE**	**FEMALE**	**MALE**	**FEMALE**	**MALE**
2016	0	0	6	0	4	1
2017	0	0	0	0	0	0
2018						

Year	Number of eye care workers trained in Primary Eye Care Training of Trainers (PEC TOT Training)					
	Age group 1 (0-14)		Age group 2 (15-49)		Age group 3 (50+)	
	FEMALE	**MALE**	**FEMALE**	**MALE**	**FEMALE**	**MALE**
2016	0	0	0	0	0	0
2017	0	0	12	12	0	0
2018						

Trend of Training and Workshop (from 2016 – May 2018)



In 2017, the number of training/workshop has been increased dramatically as compared to 2016. However, considering the current trend till May 2018, it can be forecasted that FHF would be able to reach its target by the end of 2018.

Year	Month	Activities	Achievement
2016	June	✓ Health and Family Planning Workers were oriented to identify people with basic vision problems at the community level and refer them using the appropriate referral pathway. ✓ They were provided with the necessary tool kit and communication materials. The Civil Surgeon of Barisal district gave a motivational speech on this successful program and encouraged all staff to support this project	*100% training targets achieved, however 85% of female trainee targets achieved*
2016	December	✓ A reputed training organization has imparted short-term and refresher training to 3 ophthalmologists from partner hospitals on SICS and gender equitable service delivery. ✓ Short term and refresher training (on the job) were provided to 64 MO/SACMO/MA from partner hospitals on basic eye screening assessment, OPD management and gender equitable service delivery. ✓ Short term and refresher training (on the job) provided to 29nurses from government and non-government partner hospitals on OT management and gender equitable service delivery.	*100% training targets achieved.*
2017	June	✓ Two ophthalmologists were trained and provided with on-the-job training on cataract surgery and best practices in surgical management, surgical quality assurance and post-operative care.	*100% training targets achieved.*

Year	Month	Activities	Achievement
		✓ Short term and on the job refresher training was provided to 27 Medical Officers (MOs), Sub Assistant Community Medical Officers (SACMOs) and Medical Assistants (MAs) from partner hospitals on basic eye screening assessment, OPD management and gender equitable service delivery. ✓ 19 MOs were trained on Primary Eye Care (PEC) and Gender equitable service delivery**.** For most of these MOs, this is the first learning opportunity regarding eye health care. Now they are able to provide PEC related services with proper gender equity. ✓ Training sessions were organized for 27 mid-level health personnel on Primary Eye Care and gender equitable service delivery. ✓ 299 Health and Family Planning Workers were trained on PEC, gender equitable service delivery and referral paths. After receiving this training, the health workers are more aware of gender-based needs of the patients and can provide better quality services.	

3.3 INCREASE DEMAND FOR SERVICES, AND PROVIDE EYE CARE SERVICES, WITH GENDER EQUITY IN BARISAL DIVISION

Till May 2018, FHF has taken some initiatives to address their objectives below:

June 2016: Contracts were signed with partners (Ispahani Islamia Eye Institute and Hospital and Nizam Hasina Foundation). Partners have started screening patients both at base hospital and outreach camps in remote locations, particularly targeting female patients. During this reporting period, 26,817 people were screened, and 1,786 patients received cataract surgery. These cataract patients were identified at outreach camps and were brought to the base hospital for cataract surgery. Post-surgery, they received a thorough follow-up and counseling before being released. 8,592 patients those identified with Refractive Error were provided with prescriptions.

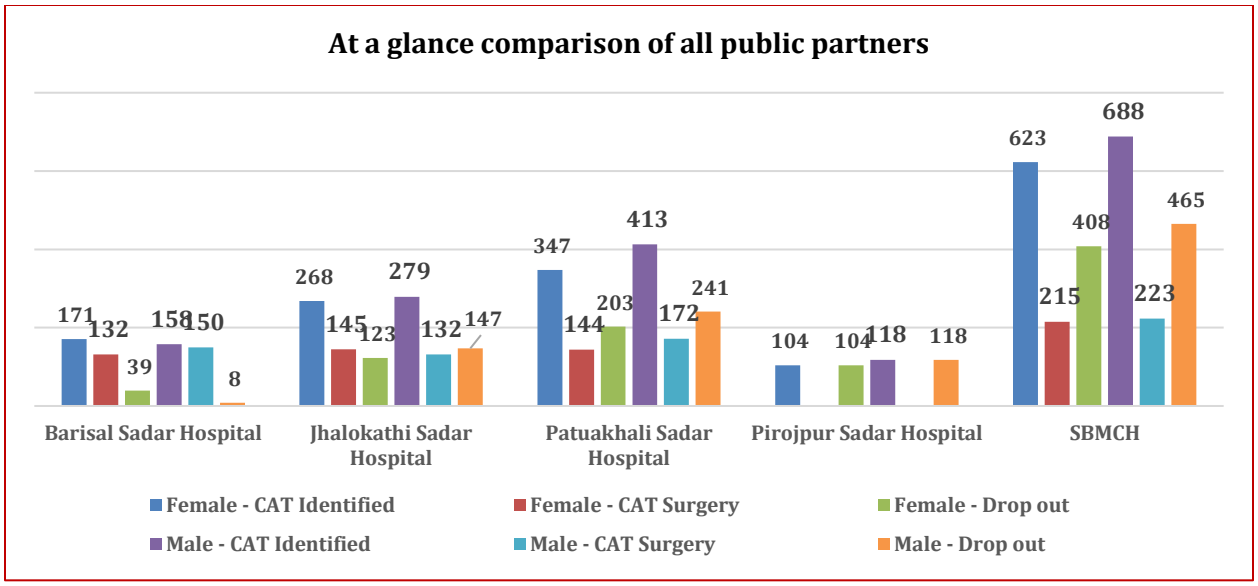
Progress: 71% complete against screening and cataract surgery targets. 115% refraction screening targets met

December 2016: With a view to increase demand and promote service uptake, awareness raising activations were organized by a well-known social marketing agency in remote areas prior to scheduled eye camps. The activations included interactive plays and pot songs, informative quiz show, drama shows, focus group discussions with elderly women of microfinance beneficiary groups and Hindu communities, and afternoon information meetings with general women. A total of 53,975 patients were screened at outreach eye camps, among which 24,722 were males and 29,252 were females. A total of 3,631 cataract surgeries were conducted in partner hospitals among which 1,872 were male patients (51.5%) and 1759 (48.5%) were female patients. Mitigation tasks and gender innovative strategies are being undertaken to increase surgery uptakes by women and reached the target of 56% female surgery

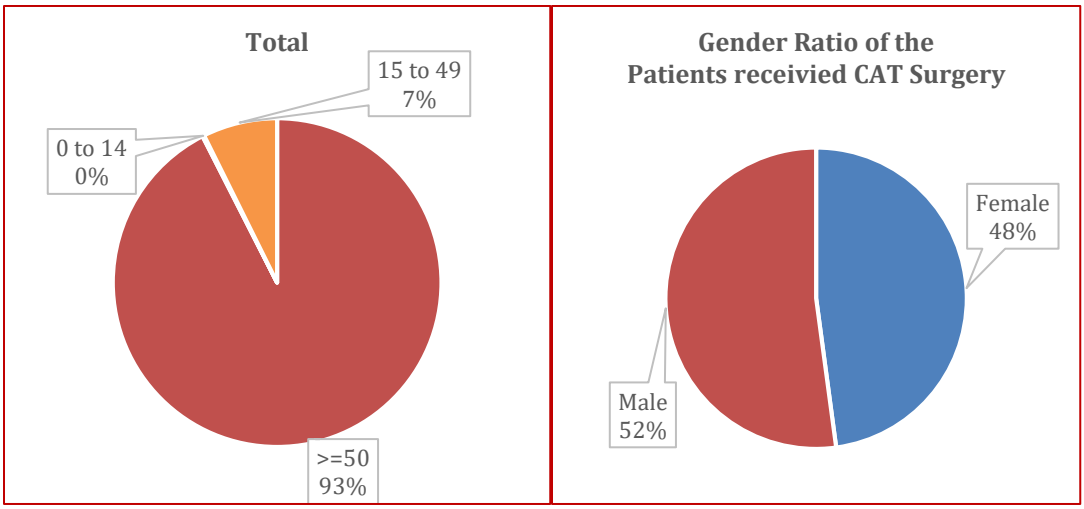
as mentioned in project proposal. 14,281 patients identified with refractive error were provided with prescriptions among which 9,018 were male and rest 5,263 were female.

2017: Prior to the scheduled eye camps and cascade trainings, awareness raising activations were organized by FHF partner organizations - Ispahani Islamia Eye Institute and Hospital, Bakerganj Forum, and the Women Empowerment Foundation in the remote areas. These helped demand creation and promotion of service uptake. The activations included billboards, miking, focus group discussions among the elderly women from marginalized Hindu communities. Robust communication activities have resulted in a higher turnout of eye patients in hospitals.

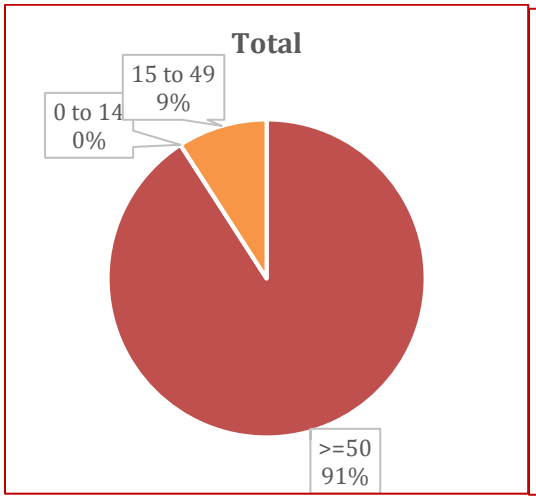
- A comprehensive Gender Strategy and SBCC strategy has been produced and strategies from these documents are being implemented.
- The School Screening Program has started in association with FHF partner Bakerganj Forum. 3,921 students were screened, among which 1,804 were male and 2,117 were female. 1,000 students have received spectacles after RE check-ups. Schools are also receiving vision charts and teachers are being trained to assist in self detection.
- A video has been produced showcasing the post-operative instructions for cataract patients. This video will be shown in waiting room televisions of partner hospitals for the patients and relatives of patients to see and be informed about what to do and what not to do for a post-operative cataract patient.
- 3,300 quality cataract surgeries were supported at partner base hospitals and during outreach activities.
- 60,500 patients received vision screening
- 15,978 patients were given prescriptions after being identified with a refractive error.
- 299 Health and Family Planning Workers were oriented on Primary Eye Care to identify people with basic vision problems at the community level, and then referring them using the appropriate referral pathway.
- Several field visits were undertaken to monitor partner activities and quality of eye care services being provided and build rapport with new partners.
- Gender specific patient satisfaction surveys were completed in partner hospitals, with results still being analyzed. Women are found to have less patient satisfaction compared to men in almost all the hospitals.
- In this reporting period, the project screened 27,311 males (45%) and 33,189 females (55%).
- Gender disaggregated data for cataract surgery is almost equal with females at 1,608 (48.7%) and male at 1,692 (51.3%).
- 6,431 males (40%) and 9,547 females (60%) patients were identified with refractive error and provided prescriptions.
- 2,117 female students (54%) and 1,804 male students (46%) were screened for refractive error under the school screening program. Among those screened, 651 female students (65%) and 349 male students (35%) were given spectacles.
- 1,800 female community members (58%) and 1,300 male community members (42%) are provided with cascade orientation on basic eye care (BEC) and gender-specific issues.

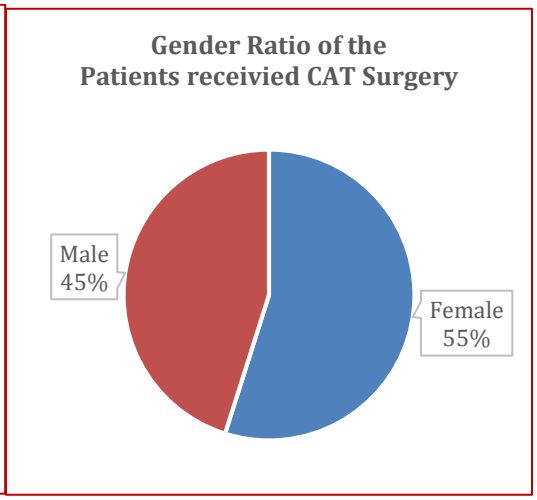


Cataract Surgery data of all private partners of SIB project (Duration - April – June 2016)

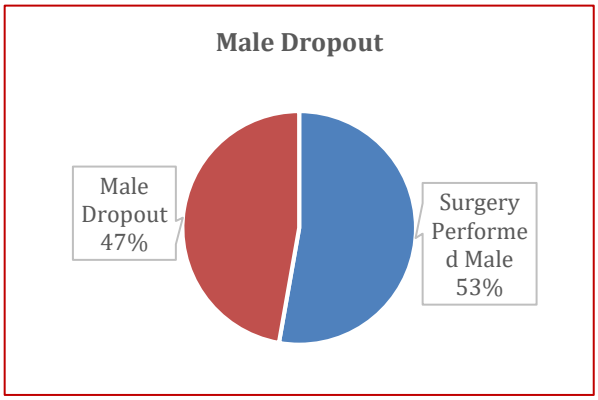


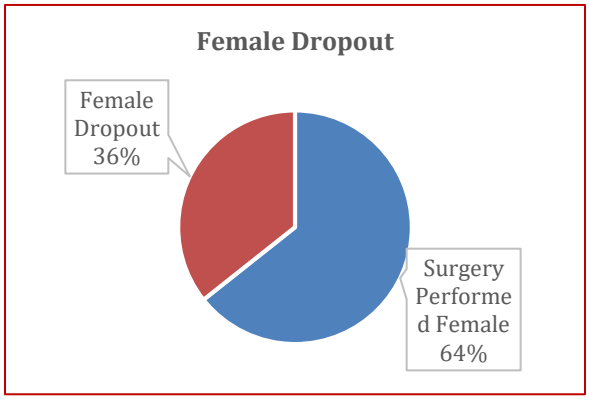
Cataract Surgery data of all private partners of SIB project (Duration - April - June 2018)



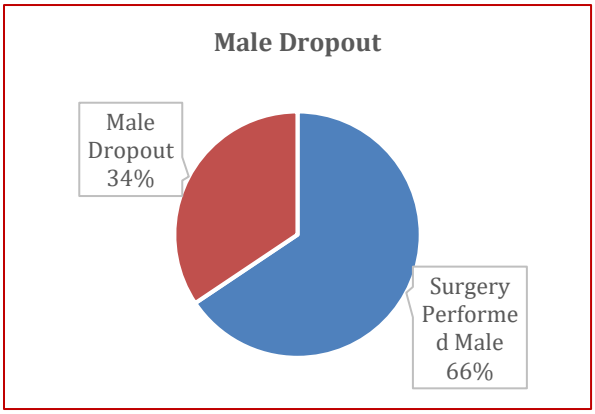


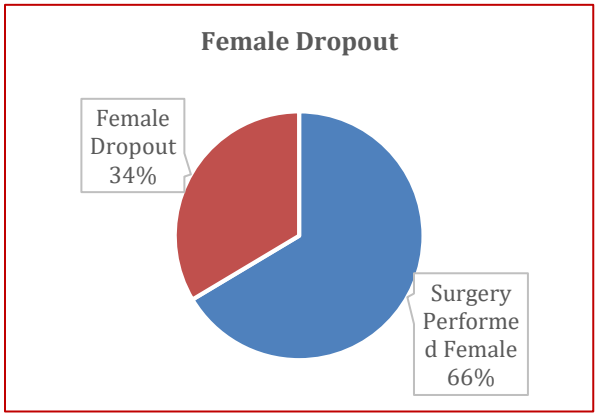
Drop Out Analysis -2016





Drop Out Analysis -2018





Dropout rate is reduced in 2018 as compared to 2016.

3.4 IMPROVE QUALITY OF EYE CARE SERVICES IN BARISAL THROUGH A HEALTH SYSTEMS STRENGTHENING APPROACH

During the observation, it was found that a steering committee chaired by Director (Health) of Barisal Division was formed by FHF to support to project management and coordination among public and private partners and help in implementation of advocacy strategy in future. This committee aims to strengthen the health system by building horizontal communication and cooperation between private and public health institutions and also build leadership and governance within the health system. Project updates and ideas were shared, in particular with regards to the innovative gender strategy.

Participants of the meeting were the Director Health, all Additional Directors, Deputy Directors, Director Sher-e-Bangla Medical College Hospital and Superintendent Patuakhali District Hospital, all Civil Surgeons(Barisal, Jhalokathi, Pirajpur, Patuakhali), senior eye consultant from Barisal, Jhalokathi, Pirajpur, Patuakhali districts, senior Ophthalmologist from Sher-e-Bangla Medical College and Hospital, Ispahani Islamia Eye Hospital, Nizam Hasina Foundation, Grameen GC, Upazila Health and Family Planning Officer (UHFPO) from Mirjaganj, Babuganj and female Medical Officers from respective health facilities of Barisal. (*Picture: The Fred Hollows Foundation)*

Basic equipment was provided to the Pirojpur District Hospital to enhance eye care service delivery. Prior to the provision of equipment, the hospital did not have the capacity to do any cataract surgery. After providing equipment they are now ready to provide quality cataract surgeries. Equipment maintenance and cataract surgeries will be completed in the next reporting period. (*Picture: IMPB)*

Eye Care Facilities	OPD Setup and renovation	OT Setup and renovation
Sher- e- Bangla Medical College and Hospital	✓	✓
Barisal Sadar Hospital	✓	✓
Patuakhali Sadar Hospital	✓	✓
JhalokathiSadar Hospital	✓	✓
PirojpurSadar Hospital	✓	✓
25 Upazillas	✓	X (Referred)

Pirojpur District Hospital has been supported to develop gender friendly renovations at district level hospitals, which were required to enhance the service delivery environment for women and men.

Equipment List for OT and OPD	
OPD	**OT**
Digital Application Tonometer	Operating Microscope
Digital Auto Kerotometer	OT Table

Slit Lamp	Spot Light
Bipolar Cautery	OT Chair
Auto Refract meter	De-humidifier
Vision Box with Stand	Auto Clave
90 D Volk Lens	Lens meter
Cross Cylinder	Sterilization Box
Color Vision Chart	Surgical Tray
Instrument Trolley for Anterior Vasectomy Machine	Kidney Tray
Direct Ophthalmoscope	OT Tray
Retinoscope	DCR Set
Indirect Ophthalmoscope	IOL Cataract Set
A-Scan	Hot Air Oven
Glucometer	Instrument Trolley for Ophthalmic Surgical Instrument
BP Machine with Stethoscope	
Anterior Vitrectomy Machine	
Head Band Examination Loop	
Trial Lens	
Vision Accuracy Chart	
Tonometer	
Digital Vision Box	

Separate waiting spaces for men and women have been established for more comfortable environment for female patients. Now, Pirojpur hospitals able to provide quality eye treatment and cataract surgeries with proper gender equity. Basic equipment has been provided to five UHCs in the Pirojpur district, which were required to enable the implementation of basic eye health screening. Currently these UHCs are able to provide quality eye care services and provide basic eye care services in a gender equitable environment.

SCB involvement

Standard Chartered Bank (SCB) has worked closely with FHF project staff in various scopes of the project. SCB staff members volunteered during the various events that were organized in celebration of World Sight Day 2016. In this special occasion, a school screening program was organized in an underprivileged location, where SCB staff volunteered to register all school students and organizing the children's queue. In this event, 200 school children's eyes were screened and of them, 37 were identified with RE and provided free spectacles. On the same occasion, a screening camp was organized for poor rickshaw pullers. SCB staff volunteered to register all the rickshaw pullers and later they distributed free spectacles to 12 rickshaw pullers who were identified with RE. Later during an interactive pot song arranged for wider community, SCB staff took part in a quiz contest about eye care and interacted with community members to raise awareness on the importance of eye care. Ms. Bitopi Das Chowdhury, Head of Corporate Affairs, SCB, visited both these eye camps and the awareness campaign.

CHAPTER 4: THE BENEFICIARIES

4.1 PROFILE OF THE RESPONDENTS

The study has covered both the female and male beneficiaries from the five project areas Barisal, Pirojpur, Bhola, Patuakhali, and Jhalokathi. The findings on the profile of the respondents have been elaborated in this chapter to set the context for presenting findings on the central issue of the study.

Demographic Profile of the Household Members

The respondents come from a diverse group and represent a wide spectrum of demographics.

Table 1: Demographic Profile of the Household Members (%)

Demographic Profile	Male	Female	Total
Average Household Size	4.3	4.4	4.4
Gender of the HH members	51.9	48.1	100
Average Age of HH (years)	34.3	32.4	33.4
Education of HH members			
No education	6.9	9.0	7.9
Can sign only	7.8	7.9	7.8
Not enrolled	5.5	5.5	5.5
Preschool (Nursery/KG)	2.1	2.1	2.1
Class I - Class V	17.0	19.2	18.1
Class VI -Class IX	28.9	31.1	30.0
SSC passed	13.7	13.9	13.8
HSC passed	9.8	7.6	8.7
Graduate	4.2	2.8	3.5
Masters and higher	3.3	0.7	2.0
Vocational/Poly technique	0.8	0.2	0.5
Occupation of HH members			
Farming	10.3	0.10	5.4
Nonagricultural Labor	7.6	0.2	4.1
Fishing	1.9	0.1	1.0
Rickshaw/van puller	3.1	-	1.6
Motorized transport worker	1.9	-	1.0
Garments Worker	1.8	0.4	1.1
Business	16.5	0.2	8.7
Housewife	-	58.2	28.0
Student	25.6	24.1	24.9
Job in the private sector	8.6	1.8	5.3
Job in the public sector	2.7	0.7	1.7
Working / Living in abroad	0.8	-	0.4
Self-employed	0.8	-	0.4
Disabled/retired/old, cannot work	7.5	5.8	6.7
Begging	0.2	0.2	0.2
Unemployed (>18 years)	1.2	0.8	1.0
Domestic helper	-	0.9	0.4
Child labor(6-17 years)	0.1	-	0.0
Tailoring	0.7	0.4	0.6

Demographic Profile	Male	Female	Total
Mechanic	0.8	-	0.4
Quack doctor	0.7	-	0.3
Others	7.1	6.0	6.6
Marital Status of HH members			
Unmarried	43.3	31.1	37.5
Married	54.8	60.9	57.7
Widow/ Widowed	1.7	6.5	4.0
Divorced	-	0.6	0.3
Separated/ Abandoned	0.2	0.8	0.5
Average HH income (monthly) in BDT	14,306	13,758	14,020
Average HH expenditure (monthly) in BDT	11,280	10,641	10,946
Total	**225**	**246**	**471**

The average household size is 4, with Bhola showing a little bigger household size (4.9). The average age of the household member is about 33.4 years old. Considering all the members of the households, the education profile shows that 7.9 % of the members are not educated. Among the others, 20.2% had some primary school education. 30% had some high school education and only 13.8% passed SSC and 8.7 passed HSC. Above HSC+ education is found among 6% of the members of the households.

Around half of the members of the households (57.7%) are married while other members are mostly unmarried (37.5%). Only 4.8% of the members are separated/divorced/widowed.

Occupation-wise 25% of the members are students, and 28% of the members are housewives. About 7% of members are Disabled/retired/old, cannot work. Other members are mostly employed in various manual labor or skilled work or small business or job.

Monthly average income of the sample households is BDT 14,020 (USD$175) and monthly average expenditure is BDT 10,946 (USD$137).

Table 2: Household Characteristics (%)

Household Characteristics	Male	Female	Total
Ownership of the current residential house			
Own	85.3	86.2	85.8
Rented	12.4	11.0	11.7
Shelter	2.2	2.8	2.5
Housing structure			
Pucca	10.7	10.2	10.4
Semi pucca	16.4	17.5	17.0
Tin-shade	72.9	72.0	72.4
Clay houses	-	.4	.2
Ownership of average land (in decimal)			
Homestead	16.5	11.3	13.8
Cultivable (One Crop)	40.3	45.5	42.8
Cultivable Multiple Crops	71.6	66.9	69.2
Water body/pond	11.6	11.6	11.6
Asset holding			
Cell Phone	96.9	93.9	95.3
Gold	68.4	72.0	70.3
Television	57.8	63.4	60.7
Silver	55.6	49.2	52.2
Cow/Buffalo	24.0	19.5	21.7

Household Characteristics	Male	Female	Total
Goat/Sheep	15.1	11.0	13.0
Bi-Cycle	18.2	8.1	13.0
Radio	10.7	9.3	10.0
Motorcycle	9.3	5.3	7.2
Rickshaw/Van	3.6	5.3	4.5
Boat	0.9	2.4	1.7
The main source of light			
Electricity	92.4	94.7	93.6
Solar	4.0	2.8	3.4
Kerosene	3.1	2.4	2.8
Candle	0.4	-	0.2
The main source of water			
Tube-well	89.3	90.2	89.8
Water piped into the dwelling	5.3	4.9	5.1
Water piped to the yard or plot	2.2	4.5	3.4
Pond/River	3.1	0.4	1.7
Type of latrine			
Water sealed	28.4	23.2	25.7
Ring slab	69.8	73.6	71.8
Open	1.8	2.0	1.9
Pukka	-	1.2	0.6
Total	**225**	**246**	**471**

The survey was conducted in 471 residential households, whereas around 85.8% of the residential house owned by the respondents. Among them, 72.4% made of tin shade. Around 13.8% of households own a homestead, while 86% own cultivable land /ponds other than a homestead. Mobile phones have been widely available in most households (95.3%). The table shows that 93.6% of households have access to electricity, either from the national grid or solar power connections.

The most common source of drinking water in is a tube well (89.8%), followed by water piped into the dwelling (5.1%), water piped to the yard or plot (3.4%), and pond/river (1.7%). Out of 471 households, 71.8% have latrine facilities with ring slab, followed by water sealed (25.7%).

4.2 GENERAL AWARENESS

In the midterm study, most of the respondents are found to be familiar with common eye health problems like cataract (88.7%) and refractive error (81.7%). Educated male respondents are found to be the most knowledgeable on cataract while an illiterate female is the least knowledgeable. In general, a higher level of awareness was found among male and urban respondents. Awareness level has been increased significantly as compared to the baseline study. Around 55% of the respondents have an adequate understanding on blindness preventions whereas 45% don't know.

Table 3: Ownership of the Household Members (%)

	Barisal (n=94)	Bhola (n=94)	Jhalokhati (n=95)	Pirojpur (n=94)	Potuakhali (n=94)	Female (n=246)	Male (n=225)	Baseline (n=3427)	Midterm (n=471)
Cataract	97.9	98.9	54.7	97.9	94.7	86.6	91.1	16.5	88.7***
Refractive Error	79.8	95.7	41.1	95.7	96.8	83.7	79.6	56.6	81.7
Eye allergy	66.0	80.9	5.3	60.6	51.1	51.6	53.8	6.1	52.7***

	Barisal (n=94)	Bhola (n=94)	Jhalokhati (n=95)	Pirojpur (n=94)	Potuakhali (n=94)	Female (n=246)	Male (n=225)	Baseline (n=3427)	Midterm (n=471)
Chronic Dacryocystitis	9.6	52.1	44.2	35.1	40.4	37.8	34.7	14.3	36.3***
Accidental eye injury	3.2	35.1	14.7	67.0	43.6	31.7	33.8	3.7	32.7***
Eye cancer	14.9	48.9		10.6	18.1	18.7	18.2	0.1	18.5***
Diabetic Retinopathy	26.6	10.6	2.1	5.3	6.4	8.1	12.4	0.8	10.2
Corneal Scarring	20.2	4.3	2.1	7.4	3.2	6.9	8.0	-	7.4
Glaucoma	13.8	2.1	1.1	1.1	1.1	3.7	4.0	1.1	3.8

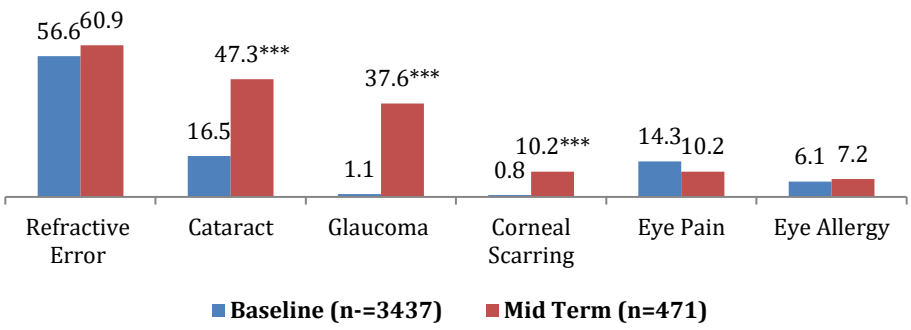
There found to be a high level of understanding/belief among the respondents that blindness can be prevented if effective measures are taken beforehand. While probing their understanding, most respondents mentioned eating nutritious food is the best measures to prevent blindness followed by early treatment and regular eye care. About 3% of respondents have no idea what so ever on blindness preventions. Some even shared more than one measures to prevent blindness. With little difference between the gender and location, some mentioned that eating nutritious food, early treatment.

4.3 KNOWLEDGE ABOUT EYE PROBLEMS

Majority of the respondents are found to be familiar with common eye health problems like refractive error and cataract. In mid-term, the level of awareness has increased significantly. In the baseline study, the respondents were found to have relatively poorer knowledge in cataract, glaucoma but better knowledge in refractive error.

However, the respondents are found in the mid-term to be more knowledgeable on eye-related diseases than baseline. A positive significant level of awareness is found on cataract (47.3%), glaucoma (37.6%) and corneal scarring (10.2). It is clear to be said that majority of the people understand refractive error as eye problem. In Bhola and Pirojpur, it has been found that people are performing better in terms of having knowledge in eye problem. However, male is found to be more knowledgeable on eye-related diseases than female, while knowledge level has been enhanced in midterm as compared to baseline study. (*Picture: The Fred Hollows Foundation)*

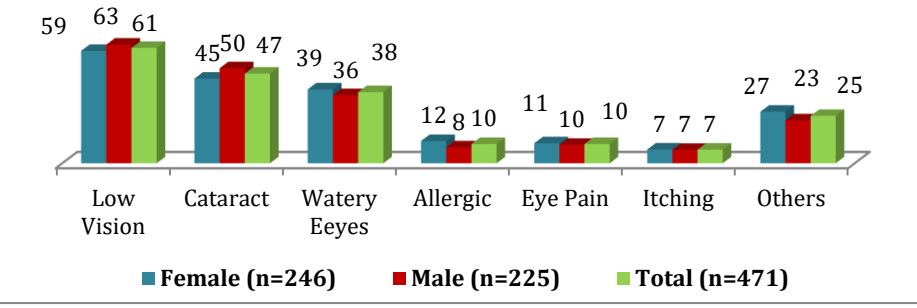
Figure 1: Respondents knowledge on different eye problems



> ***"If I go in a heavy sunshine, I see everything with much lower vision and also similar in excess lighting.***
>
> ***– Female beneficiary Pirojpur***

It is evident from FGDs that participants have primary understanding of various eye diseases, usually suffered by all levels of population in the community, of which people are mainly attacked with cataract, which is almost 40% of total eye diseases. Besides, other eye diseases like, Chronic Dacryocystitis, and refractive error, allergy, Diabetic Retinopathy, diseases that lead to blindness like Glaucoma, Corneal Scarring etc. are also found to be attacked by the community people.

Figure 2: Knowledge about different eye disease (MidTerm)



4.4 KNOWLEDGE ABOUT PREVENTATIVE MEASURES AGAINST BLINDNESS

Blindness can be prevented if effective measures are taken beforehand. Respondents mentioned if eye problem is not treated in time people might go blind (82.2%). While probing their understanding, most of the respondents (85.4%) mentioned some eye problem can be prevented and also curative care is available (98.7%).

Like most other issues related to awareness, women are lag as compared to men. However, women are improving a lot as compared to KAP study. Interestingly, in Jhalokhati awareness is comparatively not that much noticeable in terms of diseases. Details can be seen in the Table below.

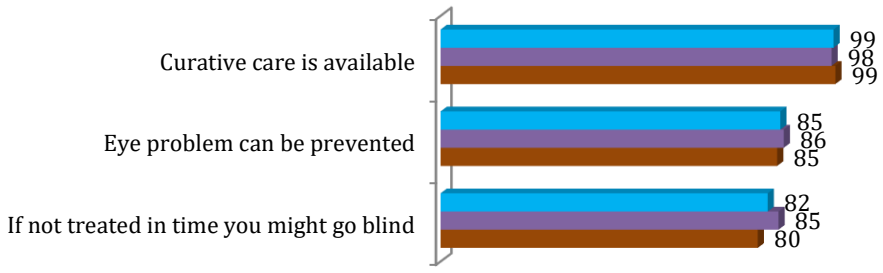
Table 4: Knowledge about Preventative Measures against Blindness (%)

	Barisal	Bhola	Jhalokhati	Pirojpur	Potuakhali
If eye problem not treated in time you might go blind	100.0	72.3	46.3	92.6	100.0
Some eye problem can be prevented	100.0	75.5	70.5	81.9	98.9
Curative care is available	98.9	98.9	100.0	97.9	97.9

Base -	**94**	**94**	**95**	**94**	**94**

The participants of FGDs opined that if the treatment in eyes is not done in proper time, there are chances of more complications in the eyes and even the consequences may lead to happen blindness forever.

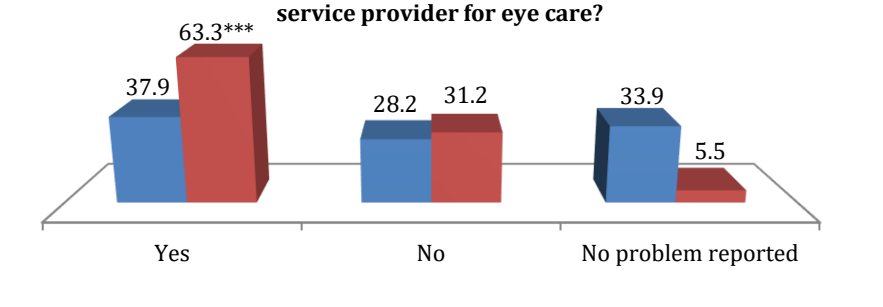
Figure 3: Knowledge about Eye Treatment (Mid term)



4.5 KNOWLEDGE ABOUT EYE CARE FACILITIES

During the midterm study, it was found that the incidence rate of seeking eye care facility has been increased positively as well as aware of the availability of eye care facilities.

Figure 4: Did the sufferer of eye problem (if any) visit any health service provider for eye care?



Among the various types of eye care facilities, government facilities are most familiar to the respondents. Relatively, private and NGO facilities are less familiar. For seeking eye health services, the respondents would visit most of the times at the public hospital (84.1%).

Around, 78% are familiar with private hospital/clinic, NGO hospital/clinic (23%) and 20% mentioned about outreach camp in the midterm study. However, treatment-seeking behavior in the midterm has increased a lot as compared to the baseline study. A positive significant change is found in terms of chosen eye care facilities.

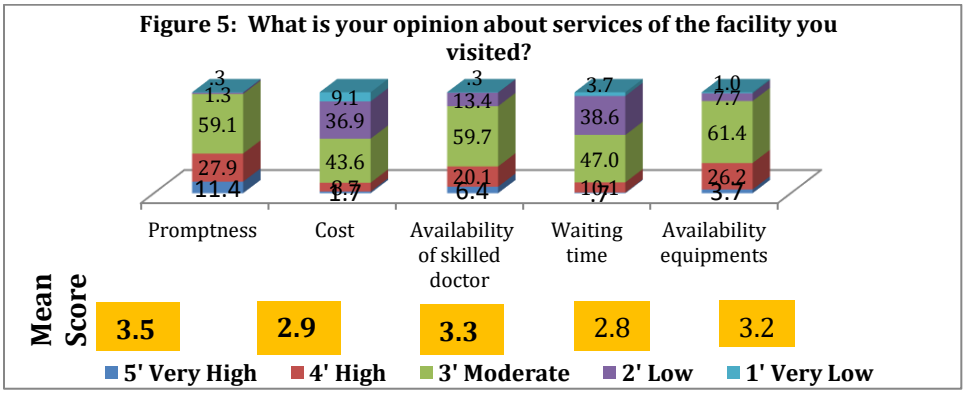
Both the male and female participants of FGDs informed that there are good facilities for the treatments of any kind of eye diseases including cataract and other surgical operations available at the local government and private hospitals and clinics. However, some people prefer government medical college hospitals, where facility of surgical and medical treatments along with other eye health care is in affordable cost.

Table 5: Household chose eye care facility for eye problem (%)

	Barisal (n=94)	Bhola (n=94)	Jhalokhati (n=95)	Pirojpur (n=94)	Potuakhali (n=94)	Female (n=246)	Male (n= 225)	Baseline (n=3437)	Midterm (n= 471)
Public hospital	67.0	83.0	90.5	87.2	92.6	86.2	81.8	42.5	**84.1*** **
Private hospital/ Clinic	89.4	100.0	58.9	69.1	73.4	78.9	77.3	34.6	**78.1*** **
NGO hospital/ Clinic	5.3	53.2	6.3	13.8	34.0	24.0	20.9	6.4	**22.5*** **
Outreach camp	25.5	1.1	64.2	9.6	1.1	20.7	20.0	5.6	**20.4*** **
Private practitioner	1.1	5.3	4.2	41.5	3.2	10.2	12.0	10.1	11.0
Others	-	-	-	1.1	-	0.4	-	0.8	0.2
No problem reported	7.4	-	8.4	10.6	6.4	7.3	5.8	0.0	6.6

As we know, distance plays a critical role while visiting an eye health facility center, especially when the patients are in critical condition. The survey revealed that around 62% of the respondents said that they have an eye health facility within five km while only 10% of the respondents said they have eye health facilities with 5 km to 10 km. About 18% of respondents in the rural areas and 11% in the urban areas have no ideas whereabouts of an eye care facilities. Patients prefer public facilities and outreach camps for a low cost. Overall, the average distance is 9.2 km as found in the mid-term study. Mostly they use auto rickshaw (91%), rickshaw (68%) and bus (32%) to go to eye health care facility centers for seeking any treatment.

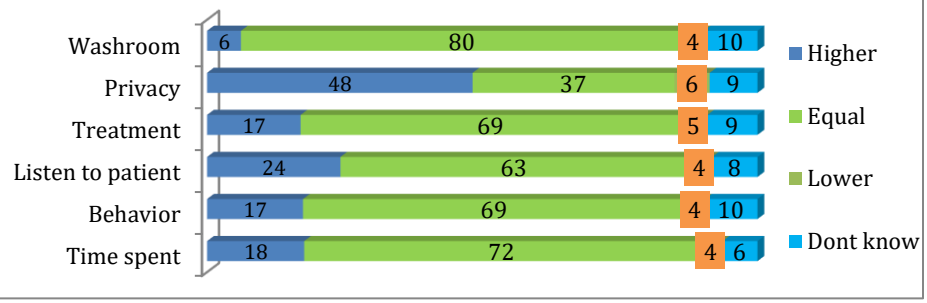
The respondents were asked about their satisfaction on physical amenities in terms of promptness, cost (of treatment), availability of skilled doctor, waiting time and availability of proper equipment. With the little or moderate difference between sex, it was found that patients are in general happy at the moderate level.



As per the opinion of the FGD participants in Pirojpur district, eye health care is not easily available in this area. The people can't visit doctors on time. They get doctors' facility at Sadar Hospital just only for

two days in a week. However, in other days, the patients have to go to private doctors, but cost is not within their affordability. The women patients are much behind of availing treatment opportunity as compared with their male counterparts.

Figure 6 :Opinion about the services of the facility given to the female patient? (Compared that to the male) (n =471)



On average, a family spends BDT 511 on eye health care per year, which represents half of the total health cost (BDT 1,020). A positive significant difference between the average share of eye health cost of overall health cost between male and female.

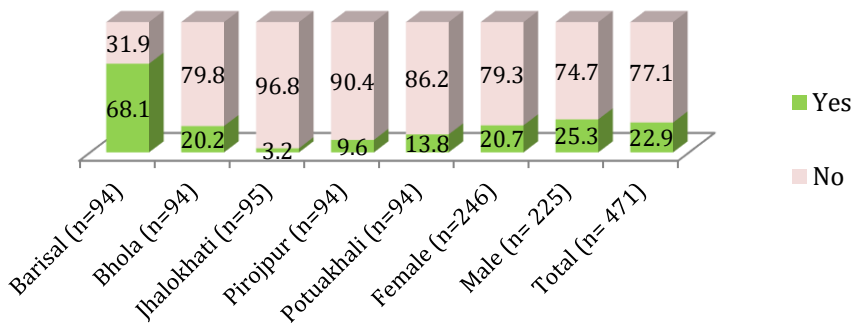
4.6 KNOWLEDGE OF EYE CAMP

In the baseline study, it was not found the existence of eye camp in the survey area. Basically, eye camp has been introduced during the period of intervention. Standard Chartered Bank's "Seeing is Believing" programme is supporting The Fred Hollows Foundation to provide ground-breaking solutions to help women access to eye care in Bangladesh.

According to the respondents, the knowledge level of eye camp has been improved slightly. Around only 22.9% people are knowledgeable in this regard. Barisal (68.1%) is performing better and Jhalokhati (3.2%) is lagged across 5 different districts.

It is evident from the views of respondents, eye that who have knowledge of eye camp feel that camp is arranged in a fixed place and gives treatment once they have examined eyes. Some of the respondents mentioned eye camp as a temporary and floating eye camp. Besides, this eye camp examine cataract and suggest the patient what to do and where to go. Most of the times eye camp takes place on school ground (63.3%)

Figure 7: Do you know about any eye-care camp?



Eye camp helps to identify disease and treatment

Various tests and examining of eyes are performed with many sophisticated machines and equipment and those who need operations, names are listed with address and cell numbers for operation on a specific scheduled date

– Female beneficiary Barisal

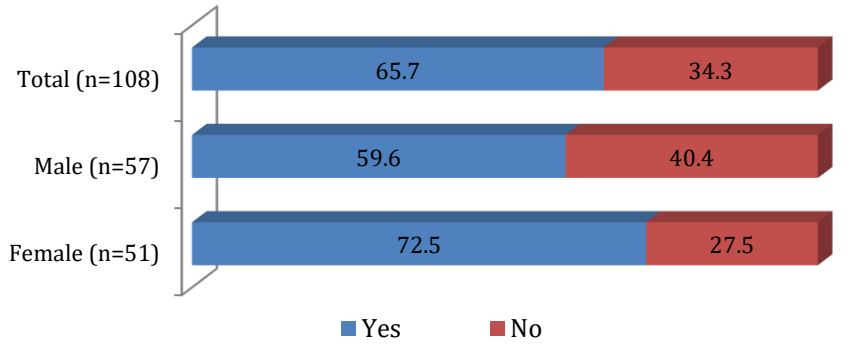
Majority of the FGD participants cited, eye camps are organized in this region from time to time, especially in government medical college and Islamia hospitals. The patients are given primary treatments with prescriptions and necessary medicines at discount price.

The women participated in the group discussions in Barisal, have found the similar knowledge on overall eye health care and diseases to the men and even they are more knowledgeable and informative than men. The participants have expressed a clear and positive view on overall activities on eye camps. They informed that eye camps are often organized in different institutions including Islamia Eye Hospital in this locality.

4.7 ACTIVITIES OF EYE CAMP

Eye camp, it seemed like a wide variety of services received by the respondents. 66% of respondents who have knowledge of eye camp attended an eye camp session conducted by the Fred Hallows. Most of the participants are female (76%) mentioned by both male and female participants.

Figure 8: Do you participate in Eye Camp?



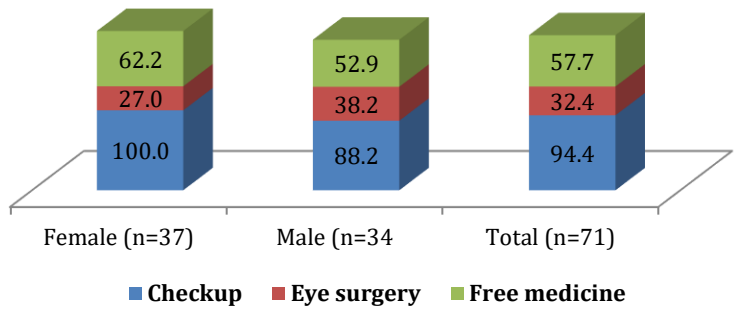
Eye camp features as an important service area as 95% of the respondents reported having received services on eye check-up. Also, the participants suggest where to go, if they need to do surgery. Surgery services were reported as another activities camp by 32% of the respondents. Fifty eight percent of the respondents reported having free medicine from the eye camp. It is noticeable that Barisal district is performing better across 5 different districts in terms of participating camp session. High advertisement i.e. miking, dissemination of leaflet could be used to circulate about eye camp and their activities.

Eye camp provides dark black spectacles

The Eye camp does different tests and examining on eyes at free of cost and providing medicines at a fair price. The patients, who were already made cataract surgery, are given dark black spectacles and medicines at the cost of BDT 400

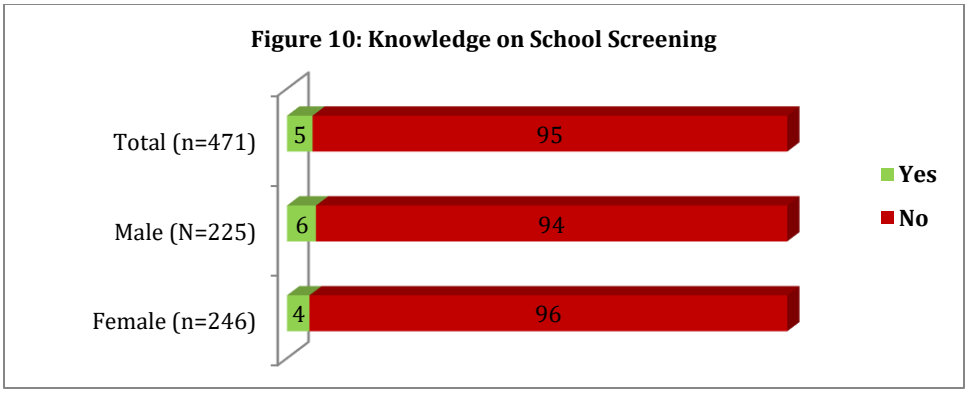
– Male beneficiary Barisal

Figure 9: Activities of Eye Camp



4.8 KNOWLEDGE OF SCHOOL SCREENING

There are approximately 75 million children (0-18 yrs) in Bangladesh. Refractive error is the major cause of childhood visual impairment in Bangladesh. It is a serious barrier to children's development and directly results in a decrease in attendance at school. Early detection and treatment of refractive error through glasses, contact lenses or surgery is important to ensure a child's normal development and permit enhanced performance of children. Traditionally, the most of national eye care activities in Bangladesh are focused on the elderly. As a result, the vision testing, refraction, and eye care services available for children in Bangladesh is a recent development. This keeps millions of children at risk of developing eye disease, of not having eye conditions detected, therefore not being treated and potentially suffering from permanent loss of sight. (*Picture: The Fred Hollows Foundation)*



Respondents were asked about the knowledge of school screening, only 5% of respondent knows about it. The school screening program has begun in this reporting period, in association with the Bakerganj Forum. In the first six months of this program 3,921 students were screened, among which, 1,804 were male and 2,117 were female. 1,000 students have been identified with RE and provided with spectacles. Among them, 349 were males (35%) and 651 were females (65%). A vision chart has been installed in these schools and teachers have been trained to provide refractive error check-ups.

CHAPTER 5: CATARACT SERVICES AND REFRACTIVE ERROR

A cataract is a clouding of the lens of the eye. The normally clear aspirin-sized lens of the eye starts to become cloudy. The result is much like smearing grease over the lens of a camera. It impairs normal vision. (medicinenet.com) For people who have cataracts, seeing through cloudy lenses is a bit like looking through a frosty or fogged-up window. Clouded vision caused by cataracts can make it more difficult to read, drive a car (especially at night) or see the expression on a friend's face. Most cataracts develop slowly and don't disturb eyesight early on. But with time, cataracts will eventually interfere with the patient's vision. *(Picture: AAO, USA)*

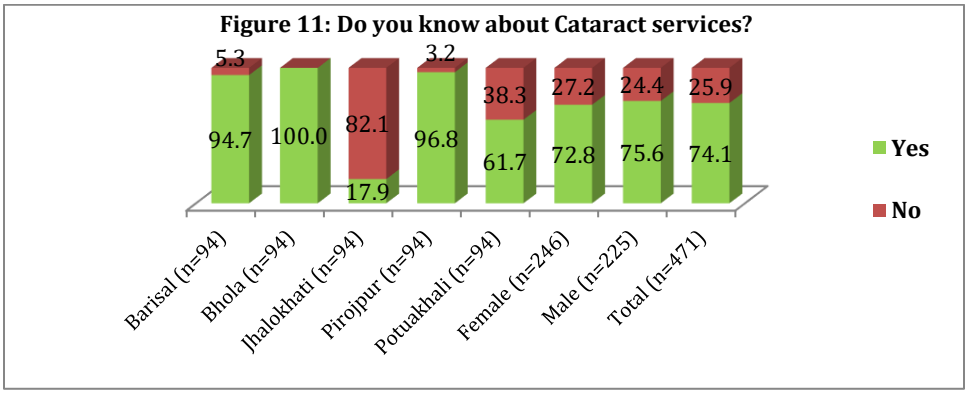
Cataract remains the leading cause of blindness worldwide. According to World Health Organization statistics (WHO 2017), at present an estimated 253 million people live with vision impairment: 36 million are blind and 217 million have moderate to severe vision impairment. 81% of people who are blind or have moderate or severe vision impairment are aged 50 years and above. The situation in Bangladesh is no difference. Here (in Bangladesh) more than 750,000 people are blind among 30+ population, of which 80% are due to cataract. Approximately 120,000 cataract patients are added every year. Over 6 million people in Bangladesh need vision correction by spectacles and other means. Approximately 150,000 irreversible blind require rehabilitation. There are about 40,000 visually impaired women and children in Bangladesh, of whom an estimated 12,000 have cataract. (Nabi 2011)

5.1 CATARACT SERVICES

It is evident from the study that overall nearly three-fourths the respondents have aware of cataract, of them 73% of the female and 76% of the male.

During the midterm, we have found that comparatively respondents of Jhalokhati districts have low level of awareness about cataract disease. Female respondents in Pirojpur districts are less aware

compared to other female respondents across five different districts. Overall knowledge level has been increased slightly in midterm (74.1%) whereas it was about 62%in baseline.



Women (72.8%) are relatively less aware of the symptoms compared to men (75.6%). The main symptoms, as mentioned by the respondents are clouding of the lens inside the eye (50.4%) and blurred vision (42.7%).

Table 6: Respondents' knowledge about various symptoms of cataract (%)

Symptoms	Female (n=179)	Male (n=170)	Total (n=349)
A cataract is a clouding of the lens inside the eye	53.6	47.1	50.4
Blurred vision	41.9	43.5	42.7
Watering from eyes	16.2	15.9	16.0
Itchy eyes/burning eyes	12.8	18.8	15.8
Short-sightedness	14.5	8.8	11.7
Pain in or around the eye area	9.5	10.6	10.0
Others	16.8	15.9	16.3
Don't know	0.6	1.8	1.1

Overall 86.5% of the respondents those aware of cataract, knew about the measures that should be taken for cataract treatment. About 86% of the respondents mentioned that the symptoms of early cataract may be improved with new eyeglasses, brighter lighting, anti-glare sunglasses, or magnifying lenses. According to them, if these measures do not help improving, "surgery is the only effective treatment".

Around 42% of the respondents who have knowledge of cataract treatment reported that any of their household

Eyes were cured

"I got cataract operation somewhere in Khulna and my expenditure was high. Their dealings were very nice, but I faced the same problem again after the operation. I had to take medicine again and then my eyes were cured."

– Male beneficiary Barisal

(HH) members received cataract surgery. The influential factors for uptake have been patients' willingness (94.5%), followed by affordable cost (75.2%) and encouragement from the family (64.2%). No difference is found between locations and gender in identifying contributing factors. However, barriers to uptake cataract treatment include negligence from the family/self-negligence, insufficient fund and lack of support/companion. Also, all these factors are more applicable to women.

Regarding the affordable cost, average cost of a cataract surgery is estimated to be Taka 7,652 (USD $95). Around 18% of the respondents reported that their HH can afford amount range BDT 1,000 – 2,000. Another 15% of the respondents mentioned BDT 2,000 -3,000and BDT 4,000 -5,000 (11%).

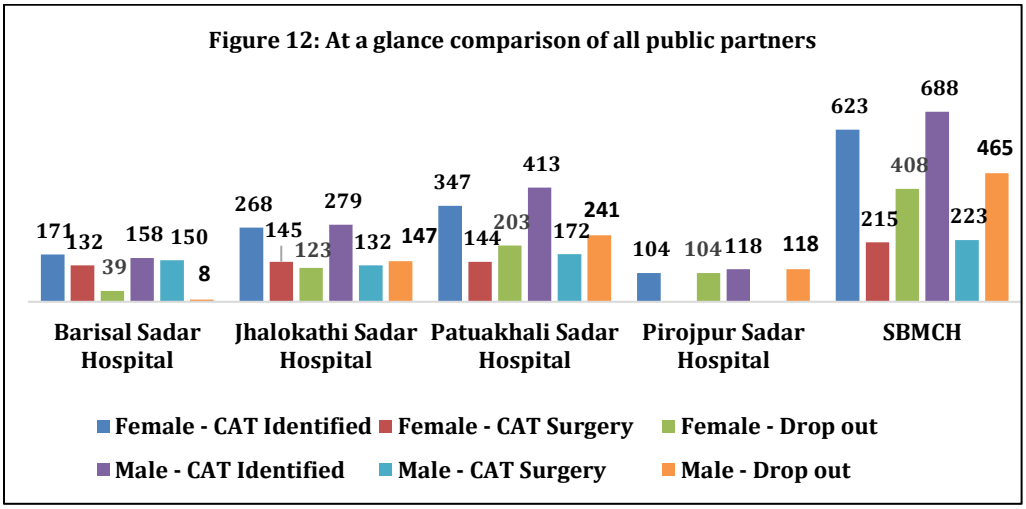
Table 7: Maximum amount can afford for a cataract surgery (%)

Amount (in Tk)	Female (n=246)	Male (N=225)
No amount	38	36
Up to Tk 500	5	3
Tk 501-1000	7	5
Tk 1001-2000	13	10
Tk 2001-3000	10	10
Tk 3001-4000	7	4
Tk 4001-5000	7	12
Tk 5000+	13	20
Average	3861	5880

Similar views were observed during qualitative research. According to participants at FGDs, cataract is the main problem of all eye diseases in Bangladesh. The people are aware of the symptoms of cataract and the participants correctly mentioned that there develops a thin membrane on eyes and becomes thick in course of time and gradually losing eyesight and having less visibility of even from the nearest place. They further mentioned that cataract is considered mainly an old age complication. According to their and perception and experience, majority of the people have cataract at the age of around 50-60 years. They have expressed their opinion that people with cataract may be blind forever if proper treatment is not done at the right time.

The participants highlighted their experience that the cataract patients are required medical/ pathological examinations before they any surgical operation. However, in some cases, the date of surgery of diabetic patients are rescheduled, if the patients are found with high level of sugar, giving them treatment of lowering sugar level to make fit for the operation. Dark spectacles and some medicines are given to the patients after surgery, free of cost.

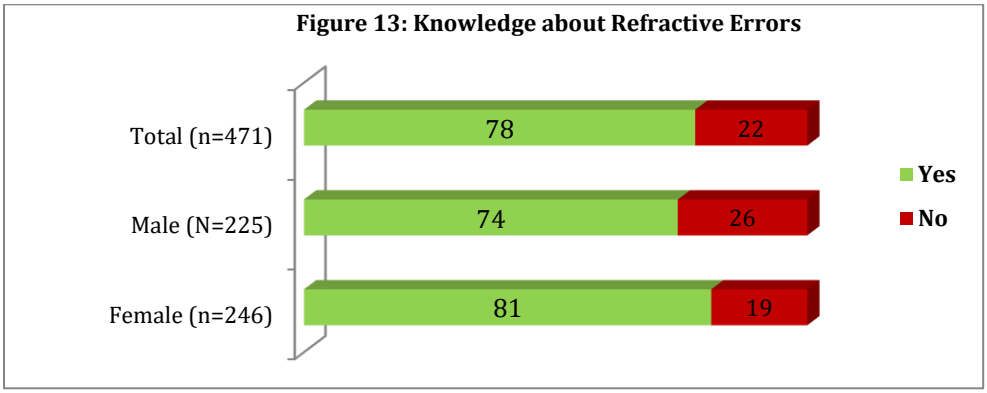
Figure 12: At a glance comparison of all public partners



5.2 REFRACTIVE ERROR

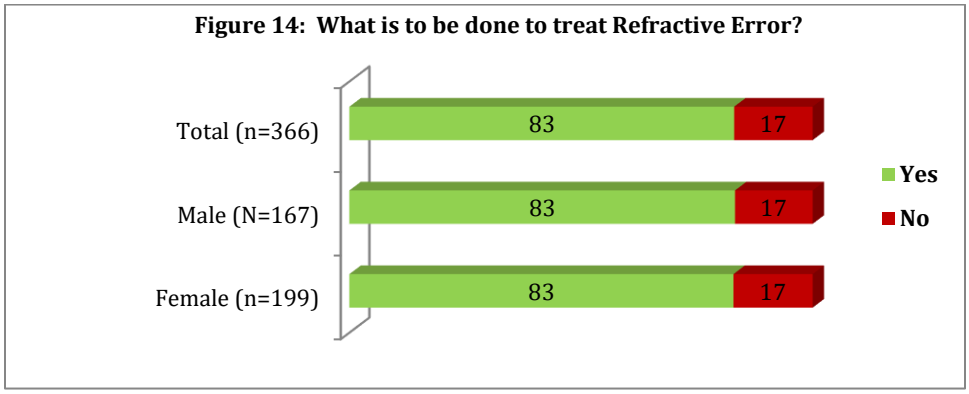
Majority of the respondents (78%) are found to be familiar with the most common types of eye health problems like a refractive error. Female respondents (81%) are found to be more familiar as compared to male respondents (74%). As like earlier, awareness has been increased significantly across the districts except for Jhalokhathi district.

Figure 13: Knowledge about Refractive Errors



To understand the level of awareness, respondents were asked to mention the common symptoms of refractive error. Most of the respondents were able to mention the common symptoms of refractive error, which are blurred vision (60%) and difficulty of seeing letters from the distance (29%). Overall 83.1% of the respondents knew about the measures that should be taken for refractive error treatment.

Figure 14: What is to be done to treat Refractive Error?



Use of spectacles is the effective treatment for refractive error reported by 42% of the respondents, followed by use of eye drop (28%) and taking prescribed medicine by a doctor (23%).

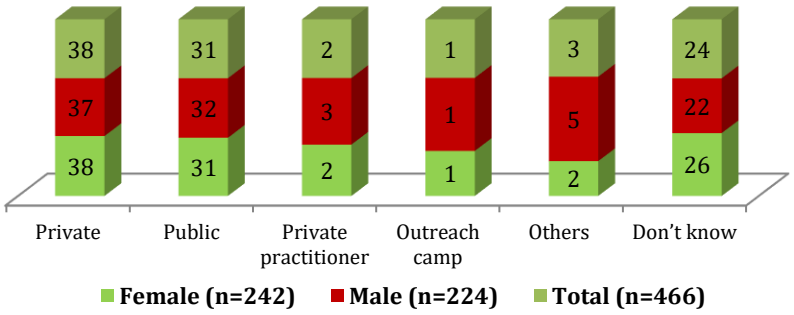
The major factors for effective treatment include patients' willingness (67%), encouragement from the family (39%) and free treatment (29%). No significant difference is found between locations and gender in identifying contributing factors. The outcome of the project at midterm has changed positively. However, as perceived by the respondents; the barriers to uptake refractive error treatment include economic hardship (34%), negligence from the family/ self-negligence (28%) etc. Self-negligence factor is more applicable to women. Barriers are found to be less as compared to baseline.

5.3 ATTITUDE, PRACTICE, AND EXPERIENCE EYE HEALTH PROBLEMS AND CARE

As a common practice, most of the time male person of the family is the main decision makers of a family. However, it was found in few cases that women also participate in the decision-making process, if they are asked to join. Around 33% of the respondents feel that they have no barriers to seeking any type of healthcare facility. In addition, respondents who mentioned different types of barriers for seeking any health care services are fund insufficiency (39%) and own negligence (33%).

There are many eye care facilities in the study areas. However, Nizam-Hasina Eye Foundation, Ispahani Islamia Eye Hospital, Patuakhali Medical College, Pirojpur Sadar Hospital, Islamia Eye Hospital and Sher-e-Bangla Medical College and Hospital services stand out to be the preferred sources of services. For seeking general/eye health services, the respondents would most of the times visits private hospitals (37%) and public hospitals (31%).

Figure 15 : Facility visited last time



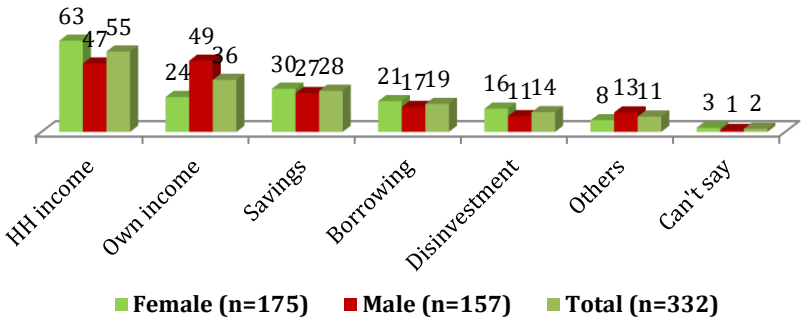
Eye health services have been made highly affordable. The respondents were asked if they had to make any additional payment other than the service charge, 30% of them did not have to pay to get services. The respondents of Barisal respondents seem to be proportionately higher ability (52%) than the average proportion that had to pay.

Table 8: Willing to pay for the care (mean) (Base –who have knowledge of eye treatment) (in BDT)

Willing to pay for the care	Female	Male	Total
Fee for consultation	1440	187	824
Diagnosis/Tests	830	2634	1631
Surgery	2735	2982	2861
In bed treatment	1492	694	1173
Drug	1065	1055	1061
Eye-glasses	669	689	680
Contact lenses	933	984	966
Tips (fee to the receptionist to see a doctor)	130	1600	718
Communication	452	579	512
Others	318	411	363

If they were to spend such money, a majority of them (55%) would manage the money from family income and self-income (35%) and borrow from friends and families (19%).

Figure 16: Different means to manage the cost for treatment



The general people in this community are aware of eye health care and surgical treatment in the government medical college hospital and private institutions and clinics. According to FGD participants in Barisal, eye treatments including cataract and other surgical operations are done in government medical college free of costs and local Islamia hospital has a charge of BDT 1500-2500 for cataract operation, but this hospital don't take any money from the poor and vulnerable patients and sometimes, the hospital authority even pay Transports/ conveyances to the poorest patients.

Hospital provided operation free of cost this year

"4 years back, the doctor detected cataract in my eyes, but as I was informed, it was not possible for me to spend 2,000-3,000 BDT for surgery during the long period and Islamia Hospital has made this operation free of cost this year".

– Female beneficiary Barisal

It was learned from the discussion that financial constraint is the main barrier of the cataract patients for delaying treatment, even some poor patients were found unable to bear a transport cost/ conveyance of round BDT 150 – 200. However, the local Islamia hospital pays the conveyance bills as well. But the FGD participants at Patuakhali informed that although cataract operations are done free of cost at local government medical college hospital, the patients have to spend around BDT 500 for buying medicines and dark spectacle. The cost is much higher at BNS - a local private hospital which costs around BDT 5,000 – 6,000 and much more in other private hospitals. They also informed that free of cost treatments/ operations are also done in those private hospitals for poor patients.

The participants in both places expressed satisfaction on overall treatment on eyes and the service providers' performance and dealings. The women and men are getting equal priority for eye treatment, but still, there are many families who are giving less importance and negligence to female patients due to lack of awareness, ignorance, social barriers, gender disparity and above all economic insolvency due to poverty.

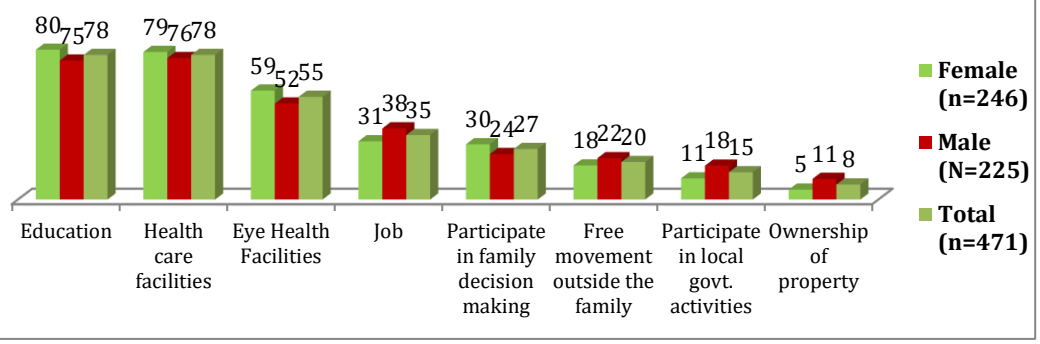
CHAPTER 6: GENDER ISSUE

6.1 GENDER ISSUE

The struggle for gender equality has been going on for centuries, especially in this part of the world. There were noticeable progresses were made but the process remains slow. The qualitative responses indicate that there are still "too much power at too many levels remains in the hands of males".

Men and women have the same rights and obligations. Both genders should have the same opportunities in life – whether in careers, raising children or issues of treatment. The table below shows that in education, health care facility and participation in family decision making processes; female members play the almost similar role as compared to male.

Figure 17: In which sectors men and women have equal access



Around 82.2% of the respondents feel that behind receiving proper treatment, male companion is necessary. However, around 46% of female patients visit health facility without accompanying a male partner. More than 50% of students feel they are safe in a doctor's chamber without a male or another female attendant. More than 55% of the women feel safe to visit a doctor/health facility. Privacy is one of the most important issues of health services. A majority of the respondents (82%) reported that a local health facility provides adequate privacy to the female patient.

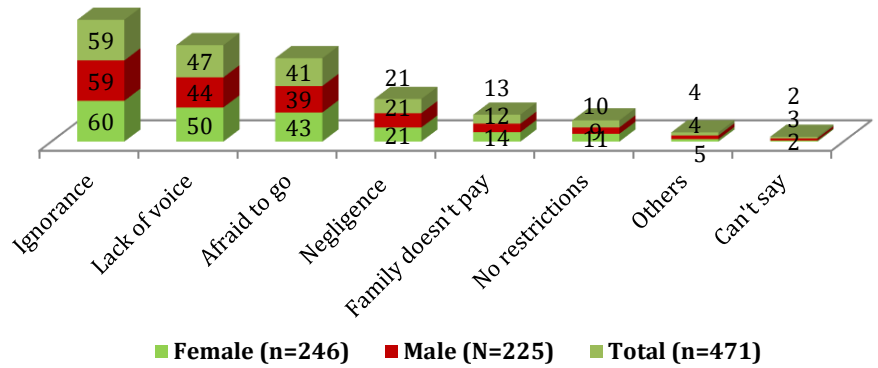
Self-negligence/Ignorance (59%), lack of voice in the family (47%), Fear of availing eye care/treatment (40%) is the main barriers for seeking eye health-related services for women.

A family is the victim of negligence

"The women are neglected for the cataract operation because the family expenditures are met with the income of man and if he has the problem of eyes with cataract, it would difficult to run the family and that is why the female member of the family is the victim of negligence."

– Female participant Barisal

Figure 18: Main barriers for women to get eye health care



The women participants from PTI in Pirojpur district described as "the women in the area are neglected for overall treatment of eyes as a matter of discrimination of gender". The men who generate income for running the family are given priority for a cataract surgery than women who are also having the same kind of problem.

Few women feel that "eye treatment is essential for a male member for running the family despite a loss of eyesight of the female member".

This is, in fact, the voice of the families in our society, who are poor in the society and living below the poverty line. There is a mixed reaction of the eye health care service in this part of the Barisal division. The eye treatment/surgery are good on average, while few participants expressed dissatisfaction with the overall performance of the eye health service.

Shakhina – a case ignorance and wrong treatment!

Shakhina (not the real name), 70, from Barisal, was one of the respondents. Her left eye had been completely deformed, causing continuous pain and headaches, while she had progressively lost vision in her right eye. After three years of suffering, Shakhina had gone completely blind.

After initially seeking local medical advice and receiving the incorrect treatment she consulted homeopathic practitioners before foregoing treatment altogether. When an eye camp was held near her village, the doctor advised her to visit a hospital in Barisal city but she decided not to take up the treatment. She and her family were worried that the treatment would be expensive, and her family could not support her travel and treatment costs.

While talking to ResInt researchers, her family members expressed their painful emotions which happened due to their ignorance and financial constraints.

CHAPTER 7: PERCEPTION ABOUT EYE CARE CENTERS

In Bangladesh rural areas, seeking health care services is often constrained by lack of perception of severity, poor access to services, and affordability. On top of this, many times, traditional or faith-healer services are obtained.

7.1 OVERALL PERCEPTION OF THE QUALITY OF SERVICES AND SERVICE PROVIDERS FROM NIZAM- HASINA/ISLAMIA INSTITUTION/SHER-E-BANGLA HOSPITAL

FHF is playing a role in creating awareness through courtyard meeting (cascade) through the volunteers. After examining the eye, FHF representatives forward or recommend the patients to Nizam-Hasina Foundation, Islamia Institution and Sher-e-Bangla Eye Hospital to do further treatment or surgery.

Good service good quality

"I want the staff and doctors to be good. I want them to take to me for the examination and explain the problems to me. If there is any complication, I want them to describe it to me in detail."

– Male participant Pirojpur

The criteria for good quality of service in an eye care center are basically set by the patient's perception of involved caring and pleasant behavior from staff and doctors. The respondents consider other factors to be indicative of quality eye care which include doctors prescribing appropriate medicines, listening carefully to patients, prescribing medicines rather than surgery, and ensuring availability of relevant medical instruments. Respondents expressed that the services at Nizam–Hasina Foundation, Islamia Institution, Sher-e-Bangla Eye Hospital are "very good". In general, most of the respondents perceived low cost and less waiting time as the main indicators of quality eye care facility.

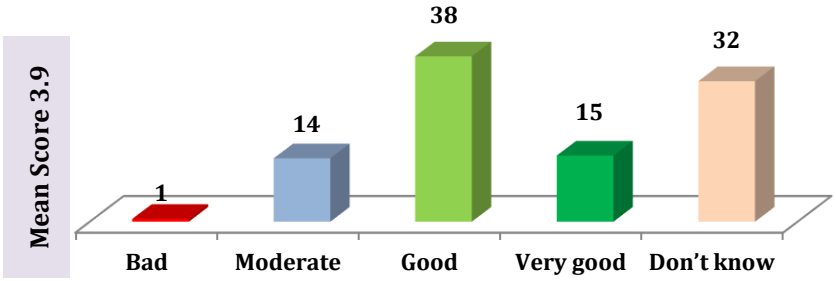
Figure 19: Overall perception of the quality of services availed from Nizam- Hasina/Islamia institution) (n=471)

Moreover, the respondents were asked to rate the service providers on their perceived quality (knowledge, service, etc.) The respondents rated them very high with a mean score of 3.9 on 4-point scale (4 equals high). Service quality is the main reason (62%) for the high ratings. Their initiative and honest effort to provide service, cordial behavior, and satisfaction generated with service – all these factors contribute to high rating (29%).

The participants of FGDs expressed satisfaction on overall treatment on eyes and the service providers' performance and dealings. The women and men are getting equal priority for eye treatment, but still, there are many families who are giving less importance and negligence to female patients due to lack of

awareness, ignorance, social barriers, gender disparity and above all economic insolvency due to poverty.

Figure 20 : Perception of the quality of the service providers at Nizam- Hasina/ Islamia eye care facilities



7.2 FREQUENCY OF VISITING EYE HEALTH CARE SERVICES

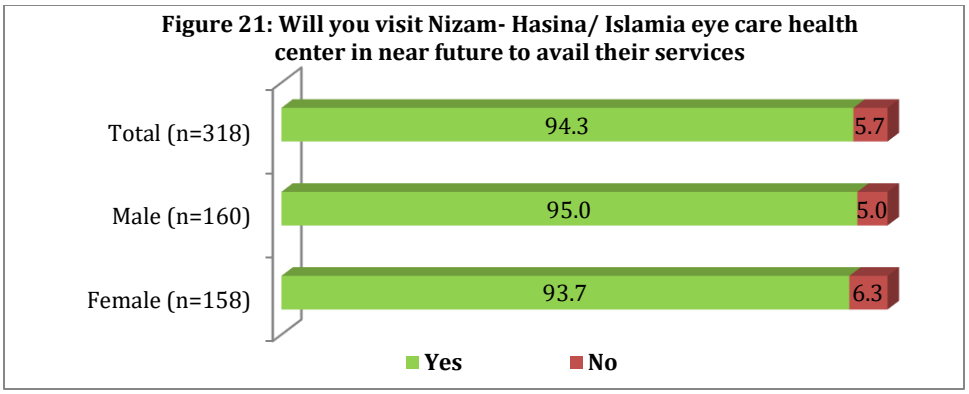
Half of the respondents (53%) mentioned that they visit eye care facilities for cataract/refractive error. However, seeking treatment is the main driver for visiting any eye care facilities. The frequently mentioned reasons for visiting a facility are quality of service (84%), followed by affordable cost (82%), less waiting time (78%), well manner (72%) and free treatment (57%) and attending courtyard meeting (especially in Gaibandha (51%) and Noakhali (42%)). Similar views were evident while discussing (in FGD) with the beneficiaries of all categories, most of them mentioned the same.

Table 9: When last visited for service (%)

	Barisal	Bhola	Jhalokhati	Pirojpur	Potuakhali	Female	Male	Total
1-30 days	30.9	41.5	0.0	0.0	2.9	23.4	20.0	21.7
31-60 days	38.3	19.1	1.1	0.0	0.0	20.9	14.4	17.6
61-120 days	4.3	16.0	-	-	8.8	5.7	8.1	6.9
121-180 days	7.4	3.2	1.1	-	5.9	5.7	2.5	4.1
180+ days	5.3	2.1	2.1	100.0	2.9	3.2	3.8	3.5
Didn't visit	3.2	3.2	23.2	-	32.4	12.0	12.5	12.3
Not required	10.6	14.9	72.6	-	44.1	29.1	38.8	34.0
Base -	94	94	95	1	34	158	160	318
Average (in days)	56	44	192	300	127	56	62	59

The frequency of visit to different eye care facilities was found highest in Barisal compared to other districts. Around 31% had visited within the last one month, with an average of 56 days since the last visit. Bhola respondents reported an average of 44 days since the last visit, with 41% visiting within the last one month. However, the Pirojpur respondents had last visited 300 days back on average (i.e. about a year), with the absence of anybody visiting in the last one month. Due to the long distance of eye facility center from their home and for the opportunity cost, respondents were having a long gap of visiting eye facility.

Majority of female (23%) had visited within the last one month, with an average of 56 days since the last visit.



Eye care facility is providing them services almost free of cost. Therefore, community people could avail health services from eye care centers in very low cost and with the quality of services. Respondents spontaneously mentioned they will visit the centers in near future (94%).

As we know, distance plays a critical role while visiting an eye care facility center, especially when the patients are in critical condition. Therefore, the key driver for choosing to visit an eye care service facility is the proximity to their residence, as over 86% of the respondents mentioned this. Service quality and free treatment/medicine are other major drivers behind visiting the facilities.

7.3 SERVICE COMPARABILITY

While the respondents were asked to compare the quality of health services between Nizam-Hasina/ Islamia eye care service/Sher-e-Bangla Eye Hospital and other available health service centers (GoB hospitals, private clinics, NGO clinics etc.) in their area, 65%opined for Nizam-Hasina/Islamia eye care service/Sher-e-Bangla hospital due to getting quality services (97%).

Though the government and other private health service centers were found far away from the surveyed community, a few of the FGD participants stated that they had availed health service from there also.

However, they stated that they were often "ignored" by the government health service providers while they visited for treatment there. On the other hand, treatment cost found higher in private health service centers compared to government health service centers and the surveyed people could not afford it. Therefore, they stated that community people always try to get health services from Nizam-Hasina/Islamia eye care service, Sher-e-Bangla hospital facilities due to very minimal cost, well behavior of the service providers and better quality of treatment.

Table 10: Do you think Nizam- Hasina/ Islamia eye care service services/treatment is better than other eye care service centers (GoB hospitals, private clinics, NGO clinics etc.) in your area? (%)

	Barisal (n=94)	Bhola (n=94)	Jhalokhati (n=95)	Pirojpur (n=1)	Potuakhali (n=34)	Female (158)	Male (n=160)	Total (n=318)
Yes	85.1	97.9	4.2	100.0	88.2	65.8	64.4	65.1
No	10.6	2.1	1.1	-		3.8	4.4	4.1
Don't know	4.3		94.7	-	11.8	30.4	31.3	30.8

Majority of the respondents (89%) expressed positive sign upon referring someone to the eye care facilities. Reasons they mentioned for referring is the good quality of services and doctors (76%), fewer expenses (25%) and free treatment (12%).

Table 11: Will you refer someone to visit Nizam- Hasina/ Islamia /Sher - e - Bangla medical College eye care facilities? (%)

	Barisal (n=94)	Bhola (n=94)	Jhalokhati (n=95)	Pirojpur (n=1)	Potuakhali (n=34)	Female (158)	Male (n=160)	Total (n=318)
Yes	100.0	100.0	66.3	100.0	94.1	88.6	90.0	89.3
No	0	0	33.7	0	2.9	10.8	10.0	10.4
Don't know	0	0	0	00	2.9	0.6	0	0.3

CHAPTER 8: COMMUNITY LEADERS, TEACHERS, AND STAKEHOLDERS

In addition to the survey, the study has also covered a wide range of In-depth Interviews (IDIs) and Key Informant's interviews (KIIs) representing community leaders, teachers, local government and public representatives, FHF staff and NGOs.

The findings are based on the in-depth interviews and KIIs with the stakeholders which are discussed in the following sub-sections namely.

8.1 OPHTHALMOLOGISTS

The Head of the Department of Ophthalmology (Eye health care) of Patuakhali Medical College Hospital, Patuakhali under Barisal Division, as being one of the leading government service provider of the project intervened area, was interviewed.

While asking about the available facility of eye health services at the hospital, the respondents informed that the hospital has been extending services to both outreach and indoor patients for the treatment of all types of eyes complications and diseases. The ophthalmologist mentioned a series of treatment of eye diseases which are being treated to the patients coming to the hospital for treatment. These are: I) Selection I) Cataract Surgery III) Calagian IV) DCR V) Teligian Graft VI) Style VII Injury bard eye treatment VIII Tumor Entropion, IX) Entropion X) Refraction treatment XI) Allergy XII) S.P.T XIII) Entrionevoeyst etc.

The patients come to the hospital with almost all types of eye problems, but in most cases, patients come to the hospital mainly with the problems of DCR (Cloudy vision) and cataract problems. Almost 20% of patients come with refractive error; while 10-15% of patients are found to come with cataract problems and rest are allergy, eye complications due to diabetics' problems and others.

Women are in most cases victim of Corneal Scarring (Netranali Problem) and diabetics related eye complications, while cataract and allergic problems are mainly found among the male patients. Female patients are relatively higher to approximate 70% than male patients (30%). As a matter of fact, women are more vulnerable having various eyes diseases than that of male, the ophthalmology specialist said while over viewing the situation of eye health care in this part of the country. The women have little scope to come to the hospital and deprived of getting treatment because of gender disparity as part of the normal phenomenon of the socio-economic culture of the country.

The respondents (ophthalmology specialist and departmental head) expressed their concern that if the treatment is not done properly in due time, the consequences may be reducing eye vision and even it may be severe that the patient may lose eyesight forever and carry forward the life with blindness. All information related to eye health complications of the patients, particularly the female patients are kept in confidence. It has been observed that the female patients normally get delay and even they never come for treatment, the reason behind is financial incapability and inconsistency. Lack of awareness is also responsible for avoiding treatment.

The respondents termed wrong treatment as "dangerous"! A wrong eye treatment may result in loss of eyesight forever. Despite various constraints, the hospital doctors are continuing their efforts with utmost sincerity to deliver best possible right treatment to all patients, irrespective to gender equity.

The female patients are given priority by all service providing personnel with comfortable staying in the hospital and baby care despite the availability of limited facilities.

The GoB hospitals provide treatments of all kinds of eye diseases to the patients free of costs, including cataract and other surgical treatment with special attention to the female and child patients. The respondents emphasized on building awareness among the population and sought for special consideration of any kind of eye treatment at low cost or even free of cost for the poor and vulnerable patients at private owned hospitals with development organizations'/ donor assistance.

Eye camps and any of this kind of outreach programs are highly appreciated and the all walks of people come forward with the hands of all kinds of cooperation to make the program a success in consideration of mitigating the sufferings of the eye patients, particularly the poor segments in the society. Different kinds of banners, festoons, placard, charts etc. with various messages and learning relating to eye health care are displayed in the outreach programs. Multimedia is also used in many cases as part of awareness building communication among the community people.

"The Building Gender Equitable Eye Care System in Barisal Division" project undertaken by FHF has been extending financial and technical support to the hospitals and other institutions related to eye health care and treatments in Barisal Division with valuable machineries and equipment and technical personnel to help overall development of eye health care in this part of the country. Free treatment and surgery to the eye patients have been possible only for overall contribution and support from FHF through this project.

8.2 SENIOR CLINICAL STAFF NURSE

Of all service providing personnel, the role of the clinical staff nurse is vital of all operational and implemental activities under the treatment of the patients. As such, an in-depth interview was conducted with this important part of the service providers' activities. The respondent is a senior clinical staff nurse in the department of eye and PDOT section of Barisal Medical College Hospital.

The respondent informed that generally, the eye patients come to the hospital will various eye-related complications, such as cataract, unclear eye vision, Vitro retinal, eye problems due to diabetes, watering and discharging from eyes etc. and proper treatments of those patients are given with due care, especially the women, who are the most victims of various eye diseases. About 80% of patients come to the hospital with vision and other problems, while IOP and SPT patient is found to visit only 10% each. Almost equal number of population from men and women visit the hospital for eye treatment, although the numbers of women eye diseases are higher than male. The effect of delaying treatment often causes too much of complications and in many cases lead to severe damage of the eye and ultimately fall in blindness. Similarly, wrong treatment may also cause loss of eye vision forever. The women are the major victims in both cases. The respondent (Senior Clinical Staff Nurse) expressed her opinion as above, while she was asked about the consequences of delay and wrong treatment. She, of course, expressed her satisfaction as saying that the socio-economic condition of general people is being changed with the empowerment of the women through engagement of various economic activities and people are now being more conscious of their health. Visiting of the eye patients are increasing day by day with various eye complications. The investigators observed physically the intensity of the patients while the respondent made it to the notice of the investigator during the interview.

The respondent needs necessity of more financial support and assistance from both Government, private sectors, development organizations, NGOs for better treatment on eyes diseases and arrange operations of cataract and other surgery free of cost or at a low cost for the low income poor population

to ensure eye treatment for all to keep eye vision alive for the ability to income and not being burden in the society.

The respondent has limited knowledge about the detailed activities of FHF ongoing project. But the service and support extended under this project by FHF in the form of donating valuable machines and equipment for testing and treatment on eyes helped the service providers to give modern treatment to the eye patients free of cost, otherwise, it would not be possible to make the proper and improved treatment to the patients.

8.3 PRIVATE HOSPITAL MANAGEMENT

The private sector health service in the country has a little different way of management and treatment to the patients. The respondent is one of the key people of the management of Ispahani Eye Hospital, Barisal, exclusively for eye health care and treatment. The hospital is providing services to the patients of both outreach and Indoor. On all outreach services, the hospital organizes *Eye Camp* through a management board in which patients are examined free of costs and medicines are supplied at fair prices. The eye camp is organized, mainly for examining and screening of affected eyes, cataract and others surgical operations for all eye patients, exclusively the poor patients free of cost.

Among other activities, school screening, cataract selection camp and eye health vision training for school children are mentionable. The indoor facilities are – OPD, cataract and retinal surgery, podiatry for a child, lens supply etc. for all patients.

Of all patients coming to the hospital, 40% are with a complaint of effective error, 8-10% is for cataract surgery, 8- 10 refractive errors, 15-20% any other eye disease complications and about 20-25% patients are for medicine. Although the hospital visitation by the female patients are little more than male patients, still there are more female patients suffering from various eye diseases and other eye complications, who do not have the opportunity to visit hospital due to social barriers, gender disparity and above all socio-economic conditions. The hospital has all facilities for the women, especially for lactating women for breastfeeding and separate washrooms.

The service providing staff of the hospital doesn't have any exclusive training for extending differentiate service to the male and female patients. But the staffs are always sincere and helpful to the patients, especially to female patients. The hospital is providing eye health care services at a very low cost and in some cases free of cost to the poor patients, particularly the women patients are treated on special considerations.

The hospital is continuing its efforts to extend medical services overcoming any adverse situations, but still, there are some challenges to have been faced in the activities.

The ongoing program of FHF has brought huge potentiality of the overall eye health care facility by their direct cooperation and financial and technical support with providing highly sophisticated machines and equipment which are being used in the eye health care services for improved treatments to the patients, especially the vulnerable people of this reason. Many people have got their new life with the regaining of eye vision and become self-reliant rather than a burden in the society.

8.4 STAKEHOLDERS: LOCAL GOVERNMENT REPRESENTATIVE (CHAIRMAN OF UNION PARISHAD, UPAZILA), COMMUNITY LEADERS ETC.

Local Government Representatives

In course of interview with local government elected public representatives, Chairman of Patuakhali sadar upazila, Chairman of union Parisad in Jhalakathi district and female ward commissioner in Pirojpur. Municipality were taken in to consideration to understand their views, perception and ideas on overall scenario of eye problems, public awareness, treatment facilities and FHF activities and contribution of supporting the people of this region through their ongoing project in Barisal Division.

All the above respondents are familiar with the eye health care activities by different eye care facilities and organizations to mitigate the sufferings of various eyes diseases and complications of the local people. They are aware of all the modern facilities on eye treatment available at the government and private hospitals in the district towns and medical college hospitals under Barisal Division. All of them stated that the eye patients are getting improved treatment from these hospitals and clinic at a very low cost and in many cases the vulnerable/ low-income people are getting medical and surgical treatments free of costs and get back to normal life and thus reducing the dependency and family burden.

They are also aware of noble contributions by FHF providing with many sophisticated modern types of machineries and equipment, installed at various hospitals and clinic in this region with financial and technical support to facilitate the ongoing services of the Government and different private hospitals/clinics. Besides, the local government public representatives are in some cases directly involved in the operational activities of eye camps at different places in the rural areas and support the organizers for a successful campaign.

The local public elected representatives motivate the people especially the women and poorer segments to get treatment from the nearby available facilities. In their opinion, the hospitals and other service providing units are considering equal treatment of both male and female patients, at the same time, the female patients are given more care of their treatments. The women are generally more attacked with various eye diseases compared to men and both are availing the medical treatments and services. But women are behind in many cases due to social barriers and unavailable facilities to move to the hospitals and less priority than men due to financial constraint and having less contribution in income generating for the family.

The local government representatives further emphasized on public awareness through communications to overcome myths and misconnects and wrong treatments by local quacks. They urged to development partners and other local private organizations to come forward and stand beside the government with financial and technical supports and thereby help alleviating eye related complications among the poorer communities.

Community leaders (Religious leaders- Mosque Imam)

As a part of the qualitative research, two community religious leaders were interviewed in-depth. They were Imam of two mosques – from Bhola and Pirojpur districts.

Both the Imams are aware of local eye health care services and have a positive views and satisfaction of the activities of different leading eye health care facilities and treatments available in their areas. They are also aware of the consequences of health problems and they advise the community people for proper treatment of any eyes problems including themselves. However, they are not directly involved in any activities on eye health care services and campaign.

As community religious leaders, who have a common acceptability by all levels of the local people in the society, informed that the people in the locality suffers from various eye diseases and problems, of which cataract, short eye vision, cloudy vision, allergy etc. are mentionable in widespread and take treatment locally, maybe around 90% of the eye patients.

The religious leaders further suggested for arranging eye camps more frequently in their communities and organize surgery of cataract and other operations free of cost for the benefit of the vulnerable people in the community.

Project Staff

Identifying barriers: Most of the village people who are economically poor and very much lack of awareness on health care and are ignorant of the available facilities, do not come to hospital or eye care centers on time to take proper treatment and don't get back their vision. According to the FHF staff, we can divide the barriers into four categories.

- Firstly, this barrier comes from the beneficiaries' side. The main reasons responsible for keeping the affected male and female patients aloof from treatment by the doctors are – myths and misconception, fear of publicly focused, considering the loss of working days for hospitalization due to a surgical operation of cataract. Wrong perceptions of female patients, biased by socio-cultural scenario, potentiality and viability of treatment from the economic point of view.

- Secondly, most of the ophthalmologists are male. Women feel "insecure" and shy when they go for treatment in a medical hospital. So, doctors need to be friendly with the female patients and inform them about their treatment.

- Thirdly, women face the barrier at the community level. FHF brings the patients or beneficial to the eye camp after eye screening volunteer recommend the patient to do further treatment (i.e. for cataract – need surgery). The male members of the family do want the conservative female members to go male doctor for treatment. In some cases, some people don't follow the doctor's instructions after operation and can't get benefit of treatment.

- Finally, financial and transport issues become prominent. Most of the cases are due to lack of transportation and cost of treatment block availing the services. To overcome the barriers, project staff suggested to raise the knowledge and awareness level among the women and other members of the family and community, because, ignorance of eye disease may even result in blindness.

Inadequate human resources capacity: According to the FHF staff, there are inadequate ~~no~~ eye surgeons at district level. Though there are around 900 clinical ophthalmologists, but 50% of them can perform cataract surgery. Moreover, most of the district hospitals have no ophthalmologist. The public health facilities remain unutilized or underutilized. In addition, the productivity of the existing ophthalmologists is affected due to insufficient ophthalmic nurses and paramedics. Though there are adequate number of ophthalmic equipment and supplies, a good number of available equipment remains underutilized.

On the other hand, majority of the eye care patients now rely on private eye facilities. As far as the cataract surgery is concerned, private facilities are by far the biggest providers' eye care services. Doctors and service providers are given various training focusing gender friendly atmosphere.

FHF introduced referral system. FHF has trained the pharmacists as a referral media and they can provide primary treatment which it limited to suggesting eye drop and medicine. FHF has further planning to develop a referral protocol for follow-up. The pharmacists will refer the patients to selective eye care clinics and hospitals.

Communication strategy: To increase the demand for services, there is a need for effective communication strategy and implementation. To attract the women and the poorer communities, it should be gender-focused and patient friendly. The strategy will include digital media and both the print and non-traditional media.

Impact of 'health systems strengthening approach to improve the quality of eye care services in Barisal

FHF directly involved with the government stakeholders. Firstly, FHF identifies the hospital where ophthalmologists are not available. They advocate with the GoB to provide a doctor at that hospital. They also try to find out to relate the doctors with the projects by providing training on regular basis. Trainings are not limited to the eye care, but also the management system. FHF renovated all the equipment to do surgery and treatment, if needed. Training is provided to the doctors (OPD management) as well as nurses (OT management). They also advocate to finalize MIS report on the regular basis. Once, all the steps are done, FHF goes to community level with their services. By using the MIS report, FHF identifies the dropout and its reasons. However, they take necessary actions accordingly. Accountability is the key point in this regard.

FHF along with Ophthalmologist attended a gender-based workshop in Nepal. A part of the workshop was on basic understanding of gender and how it is related to the work as carried out by FHF. Also, FHF also designed few group works with the doctors and SACMOs in Bangladesh similar to the Nepal workshop. After exercising with different tools, FHF highlighted the gender discriminations in the aspect of this project and formulate an action plan with everyone's participation.

Relevance

Relevance and cost-effectiveness take a lot of effort, efficacy, and advocacy to make it functionable. It will take 7-8 years to make it sustainable. Sustainability is the more important to make the project effective. The contribution is much important from the government side. FHF is trying to build the ownership among the stakeholders. FHF renovated the hospital; GoB could maintain the renovation as well as equipment after the completion of the project to make the project more sustainable. The prevalence rate is expected to be 48:52.

Suggestions

- Identify the barriers for women to access and the strategies to overcome the barriers
- Identify the service providers to be involved in this project
- Supporting and improving the transportation facility so that more women can avail eye care facility at hospital level
- Finding ways to overcome insufficient funds for spectacles
- Involving the indigenous and transgender people in this project to make a more effective inclusive model
- Collect MIS report regularly through GoB mechanism
- Retaining dedicated staff at public and private eye care facilities.

CHAPTER 9: ANALYSIS AND COMMENTARY

Avoidable blindness is a major health problem in Bangladesh. Bangladesh has one of the highest reported rates of untreated cataract in the world.

In Bangladesh more than 750,000 people are blind among 30+ population, of which 80% are due to cataract. Approximately 120,000 cataract patients are added every year. Over 6 million people in Bangladesh need vision correction by spectacles and other means. Approximately 150,000 irreversible blind require rehabilitation.

Cataract, a condition that is treatable through routine and cost-effective surgery, accounts for up to 80% of this blindness. In 2016, a total of cataract surgeries conducted in public facilities was 241 which will be considered as a baseline. To note, in 2017, the total performance of public facilities is 904 which is four times higher compared to 2016 performance.

A completed cataract operation should only be counted as a success when the patient is back home, enjoying seeing again, with appropriate correction of any refractive error. Lack of awareness and shortage of trained eye health professionals, and inadequate facilities and equipment, mean that many people are needlessly blind.

To achieve a good outcome from cataract surgery, a team effort is needed – nurses, counselors, and eye surgeons as well as the patients and their caregivers – all should have an understanding of the cataract journey (from first diagnosis to discharge), the complications that may arise, and how they can be prevented, or their impact minimized. For post-operative care to be consistently successful, systems need to be in place to support the eye team in this important work.

Fred Hollows Foundation (FHF) undertook a great project named "The Building Gender Equitable Eye Care System in Barisal Division" serving the poorer community with special emphasis among the women population. The project has been extending financial and technical support to the hospitals and other institutions related to eye health care and treatments in Barisal Division with valuable machineries and equipment and technical personnel to help overall development of eye health care in this part of the country. Free treatment and surgery to the eye patient have been possible only for overall contribution and support from FHF through this project. The beneficiaries were particularly appreciative of the eye camps due to ease of access, and free screening, consultation and referral for surgery if required.

The poorer beneficiaries appreciate free treatment, surgery, and even transportation cost reimbursement by different facilities. They feel such provision for poor people have increased uptake of treatment and surgery.

The gender sensitive facilities are now appreciated by the beneficiaries, especially women.

The beneficiaries and other stakeholders including opinion leaders and public representatives highly lauded the project initiatives. They think restoring vision not only improves the quality of life of a person but also increases productivity, self-reliance, and overall wellbeing of the society and economy.

The lasting impact the project would likely make it very much sustainable. The project has created various communication materials, and its various gender sensitive initiatives have highlighted the

importance of treating women with eye problem. Already increased uptake of service and reduced dropout rate is noticeable. The increased knowledge of many men and women, and the positive treatment seeking behavior will have ripple effect among the society and will likely sustain such behavior well beyond project duration. The capacity building of the ophthalmologists, nurses, pharmacists, FWAs and increased gender sensitive facilities, and renovated and serviced equipment will add to better service quality for a long time.

FHF are directly involved with the government stakeholders. FHF identifies the hospitals where ophthalmologists are not available, and they advocate with the GoB to provide a doctor at that hospital. They also try to find out to relate the doctors with the projects by providing training on regular basis. Training is not limited to eye care but extends to the management system. FHF renovated all the surgical and treatment equipment. Training is provided to the doctors (OPD management) as well as nurses (OT management). They finalize MIS report on the regular basis. Once, all these steps are completed, FHF finally go to community level with their services. By using the MIS report, FHF identifies the dropout and takes necessary action. Accountability is the key point in this regard.

Community awareness building, education and engagement is an important part of work in countries like Bangladesh to overcome cultural barriers and the lack of knowledge about blindness prevention and treatment, especially among women. The following are the communication activities initiated by the Fred Hollows Foundation (FHF) and the media partner to increase of service uptake of females:

- Pot song, *Gambhira* (regional folk song) involving local level team to sensitize the community
- People on basic requirement of eye health care giving special focus on women.
- Traditional drama for community members.
- Large and small billboards in district and sub-district level.
- Outreach screening camps.
- Miking (communication campaign using loudspeakers) and leaflet distribution before outreach screening camps
- Cascade orientation to community members on basic eye care.
- Signboard for each Uapzila Health Complex on availability of basic eye health care
- Celebration of World Sight

The contribution and performance of FHF project in Barisal division has shown a positive direction toward improving the eye care problems among the poorer segment, especially the women population. Considering the outcome of the project as observed in the mid-term assessment study, the project may be tried in other socio-economic segments and geographic locations.

CHAPTER 10: CONCLUSION AND RECOMMENDATION

Overall, the Fred Hollows Foundation eye health care services initiative appears to have attained tremendous success in reaching the indigenous people in Barisal districts. The Foundation has also improved the eye care status among the women and poorer communities. Significant number of beneficiaries utilizes the services and feels that if the eye health care services were not available, it would have been a matter of great trouble for the patients to avail the proper suggestion and referral system to get adequate and timely treatment.

The ongoing program of FHF has brought huge potentiality of the overall eye health care facility by their direct cooperation and financial and technical supports with providing highly sophisticated machines and equipment which are being used in the eye health care services for the improvement of treatments to the patients, especially the vulnerable people of this region. Many people have got their new life with regaining of eye vision and become self-reliant rather than a burden in the society.

From the MIS data, a trend of increasing numbers of women patients, especially in the public facilities, has been observed. These increases can be attributed to gender related initiatives which have been undertaken to date under the project for all the district level. The results below are clearly noticed during the midterm

The patients come to the hospital with almost all types of eye problems, but in most cases, patients come to the hospitals mainly with the problems of DCR (Cloudy vision) and cataract problems. Almost 20% of the patients come with Refractive error, while 10-15% of the patients are found to come with cataract problems and rest are allergy, eye complications due to diabetic problems and others.

Women in most cases are the victim of Corneal Scarring (Netranali Problem) and diabetics related eye complications, while cataract and allergic problems are mainly found among the male patients. Female patients are relatively higher to approximate 70% compared to 30% male patients. As a matter of fact, women are more vulnerable having various eyes diseases than their male counterparts, as opined by an ophthalmology specialist while overviewing the situation of eye health care in this part of the country. The women have little scope to come to the hospital and deprived of getting treatment because of gender disparity as part of normal phenomenon of the socio-economic culture of the country.

It has been seen that the beneficiaries are highly appreciative of the services they receive from various eye camps.

To ensure a gender equitable service delivery to all the patients, FHF provides training to Medical Officers and Sub-Assistant Medical Officers at different sub-districts in Barisal district. The service providers are assigned to work as a gender focal person in their respective facilities. Workshop agenda mainly covered Primary Eye Care (PEC), basic concepts of gender, address gender issues, and identify the gaps, challenges to address gender issues.

The role of the FHF services cannot be overstated as there has been visible evidence of positive eye health outcome for the people in the communities. To deliver such high-quality services through integrated model, FHF has put forth its intellectual capital, resources both financial and technical support, and its experience and expertise to the fullest extent. However, FHF eye health care project has just completed three years of its operation. So, it is difficult to summarize the project's efficiency and sustainability now. The midterm evaluation concludes that the FHF outreach initiative is implementing efficiently in Barisal district. FHF has brought about well-being to the beneficiaries' lives and has been

successfully providing financial and technical support in the hospitals and eye care facility which results in saving a number of people's lives to become blind.

According to the data, the program is still lagging in achieving some of the goals; with increased numbers of women receiving cataract surgery still remain unmet. In order to further increase numbers, the Fred Hollows Foundation team has recommended specific actions at each public health facility:

Recommendation

- Organize more awareness building communications strategy and facilitate the services to all segments of population and extend access to poor/ vulnerable patients at private hospitals and clinics free of cost or at lower/subsidized cost.
- Increase wash and toilet facilities, separate seating arrangement for female patients with breast feeding facilities.
- Ensure better treatment and facilities at private clinics and hospitals at reasonable costs, to be guided by government health policy.
- Local community leaders could be involved in these activities as a part of social responsibility to help vulnerable people for ensuring right to health care.
- Develop gender training curriculum for all providers and cascade it for all facility providers, community level providers and community leaders. Gender sensitization orientation may cover issues like privacy, women friendly services; follow up instructions and dos and don'ts.
- Organize more outreach camp for the public facilities.
    - Conduct preparatory meeting with all civil surgeons and senior eye consultants of each district hospital
    - Organize special eye camps for women on different occasions
- Distribution of communications material as leaflet to all patients especially to women and their accompanying person to ensure proper post-operative care to them at household level all as health awareness among them need improvement
- Increase the support of transportation cost for the female patients.
- Introduce regular follow up and monitoring system to minimize the drop-out rate of female patients.
- Retaining dedicated staff at public and private eye care

REFERENCE:

- AAO: American Academy of Ophthalmology; https://www.aao.org/eye-health/diseases/cataracts-pictures-videos
- Khan 2008; Seema Khan, Gender Inequality in Bangladesh, May 2008. http://gsdrc.org/publications/gender-inequality-in-bangladesh/
- Medicine.net; https://www.medicinenet.com/script/main/
- https://www.iapb.org/news/innovative-solutions-for-eye-care-for-women-in-bangladesh/
- Nabi, MN 2011; Eye Care in Bangladesh, The Daily Star https://www.thedailystar.net/news-detail-206301. October 2011
- WHO 2017; Blindness and visual impairment, http://www.who.int/news-room/fact-sheets/detail/blindness-and-visual-impairment; Oct 2017