

Development and Implementation of the 4Q Checklist for Fistula Screening and Referral in Bangladesh

WHAT IS FISTULA?

A genital fistula is an abnormal opening in the upper or lower female genital tract that causes uncontrollable, constant leakage of urine and/or feces. Obstetric fistula is usually caused by several days of obstructed labor without timely medical intervention. Iatrogenic fistula is caused by surgical error, most often during cesarean section. Traumatic fistula is caused by injury—for instance, through sexual violence, female genital mutilation, or accidents.

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BACKGROUND

While an estimated one to two million female genital fistula cases occur globally, reliable data on the distribution of cases as well as the incidence of this condition are sparse. Most studies completed to date have been facility-based, with little population-based research beyond Demographic and Health Surveys (DHS), which ask about self-reported symptoms of severe incontinence that matches fistula. Many barriers may also prevent women from actively seeking care for fistula, including stigma or shame, as well as a lack of information about causes and treatment (Baker et al. 2017).

In 2014, the USAID-funded *Fistula Care Plus* (FC+) project, implemented by EngenderHealth, conducted a consultation to assess approaches for measuring and estimating fistula incidence and prevalence. The recommendations resulting from this consultation highlighted the importance of improved approaches for screening, diagnosis, and estimating the incidence and prevalence of fistula. The consultation also resulted in a consensus about the importance of cost-effectiveness, linkages to services, and standardization of tools. These priorities and recommendations are illustrated in Table 1.

Table 1: Results of the FC+ Consultation on Fistula Measurement (FC+ 2014)

Results of ranking measurement priorities	Recommendations for fistula measurement efforts
<ul style="list-style-type: none">• Inventory and validation of fistula screening and diagnostic questions, tools, and approaches• Systematic review of community outreach methods and effectiveness in case finding and referral• Use and evaluation of multi-arm case finding (e.g., through different types of key informants) to estimate prevalence• Testing and improving estimation models, comparing results from estimation models to data from DHS or other population-based fistula prevalence surveys• Developing a fistula research toolkit and summarizing the advantages and disadvantages of different data collection approaches and tools	<ul style="list-style-type: none">• Large-scale household surveys focused only on fistula prevalence are neither cost-effective nor an ethical use of resources.• Linking community and facility level data, including surveillance or reporting by existing community cadres (e.g., community health workers), is critical.• Data collection should reflect intended use; there are differences between national-level data for measurement and estimation and the data needed to help facilities plan services.• Measurement must focus on enabling women to access and accept services.• Standard record-keeping forms are needed to improve surveillance of fistula cases and repairs.• Data collection at facility and household levels should include questions about duration to help distinguish between incidence and prevalence.

FC+ IN BANGLADESH

According to the Bangladesh Maternal Mortality and Healthcare Survey (BMMS), approximately 20,000 women are living with fistula in Bangladesh at present (MEASURE Evaluation et al., 2018). In Bangladesh, FC+ works to support fistula repairs and also to prevent fistula through interventions including support for voluntary family planning, clinical capacity building, and community outreach and education. FC+ supports approximately half of all fistula surgeries in Bangladesh and has mobilized national professional groups, government agencies, civil society platforms, and media institutions to engage in and strengthen strategies to prevent and treat fistula. Through these efforts, FC+ has brought attention to emerging aspects of fistula care, including the crisis of iatrogenic fistula and the need for recommendations related to persistent fistula-related disorders. From 2013 to 2019, FC+ in Bangladesh has supported the provision of 1,413 surgical fistula repairs, the training of 19 fistula surgeons, and the delivery of 105,592 couple-years of protection through voluntary family planning services.

4Q CHECKLIST PILOT IMPLEMENTATION

The 4Q Checklist is a tool with four fistula screening questions adapted from a fistula diagnosis job aid developed by EngenderHealth and IntraHealth during the prior USAID-funded Fistula Care Project. FC+ modified the job aid to add content related to fistula screening, referral for diagnosis and treatment, and follow-up support. Because the symptoms of a complete perineal tear (CPT) are identical to fistula and FC+ supports the repairs of these maternal injuries as well, the 4Q Checklist is also used to identify suspected CPT cases. The 4Q Checklist is illustrated in Figure 1.

Fistula related symptom recording form		Diagnosis by a doctor:	
Household # :		VVF	RVF
Name : Care of :		CPT	(1" / 2" / 3" / 4")
Relation : Para :		Others (Specify):	
Village : Upazila : District :			
National ID no : Mobile No :			
Please circle responses as appropriate			
1	Does she experience leaking of urine or feces or both through birth canal at the time during day and night even when she is not trying to urinate or defecate?	Yes/ No	
2	If yes to question #1, did this leaking start after she delivered a baby or had a still birth?	Yes/ No	
3	If yes to question #1, did this leaking start after any operation in the lower abdomen (C-section, Hysterectomy, Laparoscopic surgery etc.)?	Yes/ No	
4	Did she ever experience a delivery which resulted in a tear of the vagina extending up to the anus?	Yes/ No	
<p>*** If the answers to questions # 1 then refer the patient for examination to see she has genital fistula.</p> <p>*** If the answer to question # 4 is 'yes' then refer the patient to check if she has complete perineal tear.</p>			
Where she is referred to :			
Signature of SSK :		Date :	
Designation :		Date :	
Advice:		Name of Doctor :	
		Signature :	
		Date :	
		Place :	

Figure 1: FC+ 4Q Checklist

The project applied this checklist in partnership with the Bangladesh-based organization BRAC. BRAC is one of the largest non-governmental development organizations in the world and is known for extensive community-based service provision and its contribution to improving healthcare services in Bangladesh. FC+ worked with BRAC in the Faridpur district, which has a total population of 1.8 million people. FC+ selected Faridpur because BRAC was already implementing a community-based maternal, newborn, and child health program in that area. FC+ and BRAC introduced fistula activities (see Figure 2) and the 4Q Checklist into the activities of community health workers (CHWs) between June and December 2016.

প্রসবজনিত ফিস্টুলা

প্রসবজনিত ফিস্টুলা কি?

বাধাহীন প্রসবের কারণে মায়ের মাসিকের রাস্তা দিয়ে অনবরত প্রসাব বা পায়খানা বরা।

ফিস্টুলা সেবা সম্পর্কিত তথ্য এখন

ব্র্যাক-এ

প্রসবজনিত ফিস্টুলা কেন হয়?

প্রসব ব্যথা ১২ঘণ্টার বেশী স্থায়ী হলে বাধাহীন প্রসবের কারণে ফিস্টুলা হতে পারে।

রোগীদের জন্য সম্পূর্ণ বিনামূল্যে চিকিৎসা ও অপারেশনের ব্যবস্থা করা হয়

এ ছাড়াও প্রসবজনিত ফিস্টুলা রোগের চিকিৎসা পাওয়া যায়-

- বঙ্গবন্ধু শেখ মুজিব মেডিকেল বিশ্ববিদ্যালয়ে, শাহাবাগ, ঢাকা
- কুমিল্লা হাসপাতাল, মির্জাপুর, টাংগাইল
- মামুস হাসপাতাল, ইকটন, ঢাকা
- ডাঃ মুজিবুর কমিউনিটি হাসপাতাল এন্ড পার্ক ল্যাব, বিজয়নগর, ঢাকা
- হোপ ফাউন্ডেশন হাসপাতাল, রামু, কক্সবাজার
- ল্যাম হাসপাতাল, পার্বতীপুর, দিনাজপুর
- আদ-বীন হাসপাতাল, মণিবাজার, ঢাকা
- আদ-বীন হাসপাতাল, রেল রোড, যশোর
- আদ-বীন হাসপাতাল, বরগা, ফুলবাড়ী
- ন্যাশনাল ফিস্টুলা সেন্টার, ঢাকা মেডিকেল কলেজ হাসপাতালসহ দেশের দশটি সরকারী মেডিকেল কলেজ হাসপাতাল

Figure 2: Community mobilization material used by FC+ and partners in Bangladesh



Orientation and training of BRAC CHWs.

Photo: ©Nitta Biswas/FC+ Bangladesh

Two cadres of BRAC CHWs, the *sasthya sebikas* and the *sasthya kormis* received an orientation on fistula and training for screening and suspected case identification. The *sasthya kormis* enumerated a list of all ever-married women through home visits using a structured register. BRAC CHWs used the 4Q Checklist to identify suspected fistula and CPT cases in 79 unions of Faridpur district. CHWs recorded the names of women with suspected cases of fistula in a register and provided referrals to a community-based fistula

diagnostic event (CFDE). At a CFDE, a team including female physicians, nurses, paramedics, and support staff administered a four-stage intake, examination, and diagnosis process (see Figure 3).

Through these community-based screening and referral activities, FC+ identified 149 fistula and CPT cases among 409,626 ever-married women (see Figure 4), reflecting a fistula/CPT prevalence of 3.64 per 10,000 ever-married women.

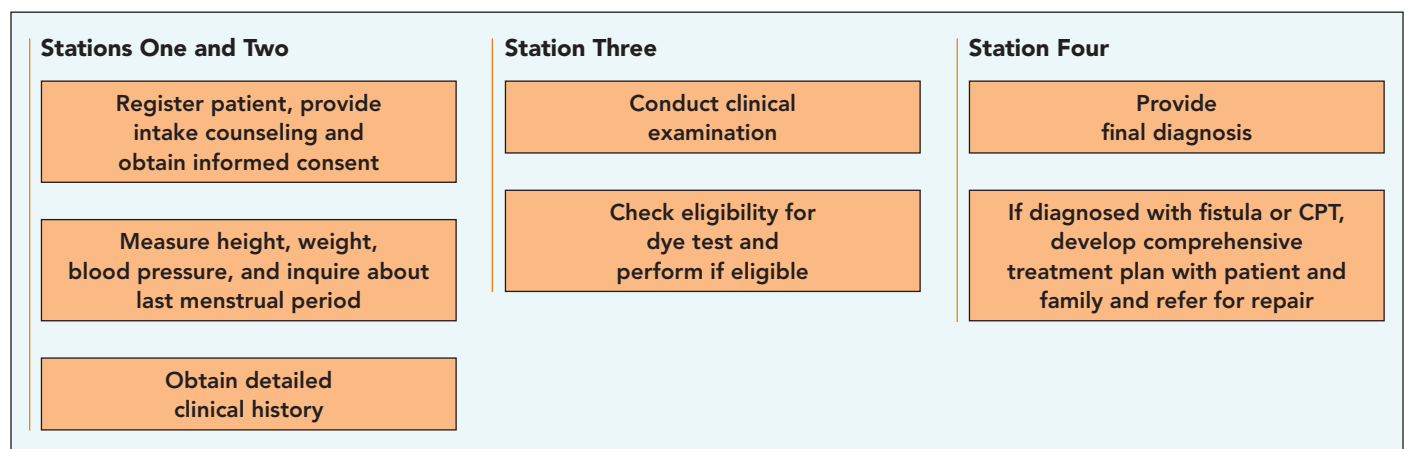


Figure 3: CFDE diagnosis protocol

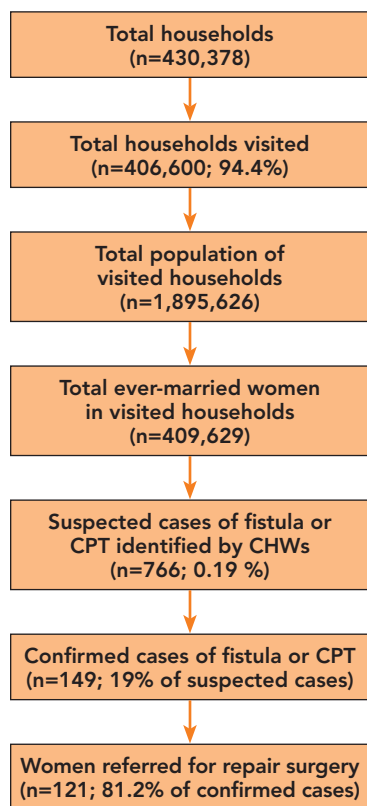


Figure 4:
4Q Checklist Pilot Results

INSTITUTIONALIZATION OF THE 4Q CHECKLIST IN BANGLADESH

Following its successful pilot in Faridpur, the Director-General for Health Services within the Ministry of Health and Family Welfare recommended launching the 4Q Checklist in community clinics across Bangladesh for fistula case identification and management. At present, FC+ is supporting implementation of the 4Q Checklist in more than 200 community clinics.

The 4Q Checklist is now also used by all FC+ partner organizations in Bangladesh, through the following five-step process:

- 1) FC+ identifies a community-based organization (CBO) in a particular area.
- 2) CBO partners' field workers receive orientation and training on fistula and how to use the 4Q Checklist for fistula case identification.
- 3) Trained CBO field workers identify suspected fistula cases using the 4Q Checklist and send one copy of the 4Q Checklist to a focal point in the CBO.
- 4) When a CBO has identified 20 to 40 suspected fistula cases, a team of trained nurses and doctors travel to the area to host a CFDE in order to confirm fistula, as per the process described in Figure 3.
- 5) Fistula patients' referrals for treatment are followed up using the 4Q Checklist.

To date, more than 1,100 fistula cases have been identified using the 4Q Checklist in Bangladesh.



Launch of 4Q Checklist with representatives from the Ministry of Health and Family Welfare, the University Fistula Center at Bangabandhu Sheikh Mujib Medical University, and the Obstetrical and Gynaecological Society of Bangladesh.

Photo: ©PK Podder



Debipur Community Clinic, Shyamnagar, Satkhira.

Photo: ©Sampad/Community Healthcare Provider

RESEARCH AND PROGRAM IMPLICATIONS

Attempts to estimate the global fistula burden have varied widely, from one to two million total fistula cases, depending on the source (Adler et al. 2013, Dolea and AbouZahr 2003). Incidence estimates range even more, from 6,000 per year to 130,000 year in various studies (Adler et al. 2013, Wall 2006).

The burden of fistula can also vary dramatically, even within countries, depending on many factors, including fertility rates, delivery care, the availability and quality of emergency obstetric and newborn care, the safety and volume of cesarean sections and other pelvic surgeries, and the availability and accessibility of fistula treatment services. As a result, even valid national estimates can be of limited value in planning and organizing screening and treatment services at subnational and local levels. In such contexts, tools like the 4Q Checklist can be useful for rapidly estimating fistula needs and informing local planning of treatment and support interventions.

It is notable that the 4Q Checklist pilot in Faridpur resulted in similar findings as the 2016 Maternal Morbidity Validation Study (MMVS) in Sylhet district, nested within the BMMS. While applying very different approaches (sampling versus census approaches) and different screening tools, and despite working in different settings, these two efforts generated comparable estimates of fistula prevalence, as illustrated

in Table 2. As fistula incidence and prevalence can vary widely within countries, and these districts are in different divisions of Bangladesh, this similarity cannot be interpreted as a validation of either approach. However, together these estimates provide information that can help policymakers and programmers allocate resources for fistula prevention and care services. As the 4Q Checklist is used in additional locations across the country, a more accurate and detailed picture of the fistula burden in Bangladesh will emerge.

Table 2: BMMS and 4Q Checklist Estimates of Fistula Prevalence (MEASURE Evaluation 2018)

	BMMS Data from Sylhet	4Q Checklist Data from Faridpur
Prevalence	3.78 per 10,000 ever-married women (ages 15–64)	3.64 per 10,000 ever-married women (ages 15–64)
Symptoms question(s)	Does your urine leak continuously, even when you are not urinating and not trying to urinate? Do you currently experience feces passing through the birth canal that you cannot stop, even when you are not defecating?	Does she experience leaking of urine or feces through the birth canal all the time during day or night even when she is not trying to urinate or defecate

REFERENCES

- Adler, A.J., Ronsmans, C., Calvert, C., and Filippi, V. 2013. "Estimating the Prevalence of Obstetric Fistula: A Systematic Review and Meta-Analysis." *BMC Pregnancy and Childbirth* 13 (December): 246. <http://www.biomedcentral.com/1471-2393/13/246>.
- Baker, Z., Bellows, B., Bach, R., and Warren, C. 2017. "Barriers to Obstetric Fistula Treatment in Low-Income Countries: A Systematic Review." *Tropical Medicine and International Health* 22, no. 8 (August): 938-959. doi: 10.1111/tmi.
- Dolea, C. and AbouZahr, C. 2003. *Global Burden of Obstructed Labour in the Year 2000*. Geneva: World Health Organization. https://www.who.int/healthinfo/statistics/bod_obstructedlabour.pdf
- Fistula Care Plus and Maternal Health Task Force. 2014. *Fistula Care Plus: Report of Technical Consultation on Fistula Measurement and Estimation, July 10–11, 2014*. New York: EngenderHealth/Fistula Care Plus.
- MEASURE Evaluation, icddr,b, the Maternal & Child Health Integrated Program, Fistula Care Plus, and Johns Hopkins University. 2018. *Prevalence of Obstetric Fistula and Pelvic Organ Prolapse in Bangladesh: Summary of the 2016 National Estimates*. Chapel Hill: MEASURE Evaluation. <https://www.measureevaluation.org/resources/publications/fs-18-290>.
- Wall, L.L. 2006. "Obstetric Vesicovaginal Fistula as an International Public-Health Problem." *Lancet* 368 no. 9542 (September): 1201-9. doi: 10.1016/S0140-6736(06)69476-2.

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The USAID-funded Fistula Care Plus project at EngenderHealth works to prevent fistula from occurring, treats and cares for women with fistula, and assists in their rehabilitation and reintegration. Fistula Care Plus partners with ministries of health, faith and community-based organizations, nongovernmental organizations, United Nations agencies, and other stakeholders, including hospitals providing surgical and nonsurgical fistula repair in South Asia and Sub-Saharan Africa.

For more information about fistula and the Fistula Care Plus project, visit www.fistulacare.org.

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