Dr Zafrullah Chowdhury and Gonoshasthaya Kendra

Dr Zafrullah Chowdhury was one of the founders of Health Action International and HAIAP. He was

the founder of Gonoshasthaya Kendra (GK) - People's Health Centre - a rural healthcare organisation in Bangladesh. In 1971, during the Bangladesh Liberation War, he and colleagues set up the 480-bed Bangladesh Hospital for freedom fighters and refugees run by a team of Bangladeshi doctors, medical students and volunteers. Women were trained within days to help provide care for patients. In 1972, Dr Zafrullah set up GK for providing all basic healthcare to the community by paramedics from the community – trained at GK and supported by a strong referral system. The centre also runs a university, hospital, agriculture cooperatives, printing press, community schools, a generic drug manufacturing plant and a vocational training centre. All basic services, for example plumbing, electrical services, vehicle maintenance and carpentry, are provided by women who are trained on site. GK has been very successful in providing family planning services, lowering maternal and infant mortality rates as well as manufacturing good-quality, cheaper essential generic medicines. Dr Zafrullah was the force behind the Bangladesh National Drug Policy formulated in 1982 that ensured access to essential medicines for all Bangladeshis. He was awarded the Ramon Magsaysay Award for Community Leadership in 1985; and in 1992, he was awarded the Right Livelihood Award for his 'outstanding record of promotion of health and human development.'

Gonoshasthaya Kendra

Gonoshasthaya Kendra (GK) was established by Dr Zafrullah Chowdhury and colleagues in Savar, Bangladesh in 1972 to deliver basic integrated health care in the rural areas. The mainstay of GK's health care delivery system rests on a team of community health workers called 'paramedics', most of whom are young rural women. Through them, health services have reached rural homes and the poor in particular have been able to gain access to education, medical services, health education and essential medicines.

Although GK's health program aimed to provide domiciliary health care to rural poor households on a priority basis, it was soon found that women were neither attending to their own health needs nor their children's. On querying why they did not take advantage of the local clinical services at earlier stages of symptoms, it was found that most women depended on male members of their households to escort them to the health centres. The fact that women rarely had available cash further restricted their ability to benefit from clinical services. It was clear that, if GK's health program was to achieve any sustainable impact, women had to be involved in education and earning a living. The oppression that women face in a conservative rural society and the increasing trend of insecurity in marriage meant that more and more women found themselves in helpless situations without any non-familial institution to turn to.

GK's philosophy of people's health care - two main pillars: economic and health security

GK has succeeded in breaking social barriers and creating a training environment conducive to women's confidence building and skills development, as well as self-determination for the whole community. This environment has allowed both capacity building and job creation for those rendered poor, especially women; as well as better health care for those who have not in the past had the access to the means to health care. Nationally, this work has influenced the government to include community health workers in its health and family planning program and also influenced the government to increase opportunities for women in other sectors.

GK focus - Primary Health Care with a holistic approach to health – a basis for human rights

- Emphasis is on the well-being of a person, not just the absence of disease
- GK addresses the poverty issues that bring about malnutrition, illiteracy, lack of clean water and poor sanitation

- It addresses gender issues. Only a very small number of organisations have applied innovative strategies of empowerment that challenge the traditional gender division of labour - GK is one of them.
- Women are provided with skills for jobs that the community cannot do without, for example, plumbing, electrical work and construction.
- Women's salaries are paid into their own bank account so they keep control.

GK offers:

- Access to health in the community and in primary, secondary and tertiary health facilities
- Community health insurance
- Empowerment of women
- Income self-sufficiency for all, especially women. Women learn skills for work in farming, factory and industrial work such as in producing essential pharmaceuticals, printing, carpentry, metalwork, footwear, textiles and plumbing supplies.
- Education for all: primary and secondary schools, university, vocational training schools.

Gonoshasthaya Kendra (GK) established its PHC program in 1972 – long before the Alma-Ata Declaration – and has developed far beyond the concepts articulated at Alma-Ata. GK has recognised needs as they arise and addressed them.[1]

Background

In 1973, GK introduced locally organised health insurance based on social class and income.

GK currently provides services to six categories of people: ultra-poor, poor, lower middle class, middle class, upper middle class and rich. Households are charged according to the category they belong to. Every family member gets appropriate and affordable health care services whenever needed. For example, a rich household must pay 10,000 taka for a caesarean section, whereas a poor or ultra-poor household would be charged a mere 3,000 taka.

GK's mission is to prove that low-cost health care is feasible. Ultimately, it wants the state to rise to the responsibility of introducing social health-care insurance to cover the entire nation.

GK is not a profit-making insurance company but introduced a social-class-based affordable health scheme to make health care easily accessible and affordable. It reduces the out-of-pocket spending by low-income people for their health care services. This will be a role model for universal health coverage for people in the low-income group.

[1] https://gonoshasthayakendra.com/project/health-insurance-pilot-project-for-rmg-worker-in-bangladesh/

Response to current needs

A dialysis centre for all who need it in Dhaka, Bangladesh

Gonoshasthaya Kendra (GK) in Bangladesh aims to improve the quality of life and particularly the health of the rural masses in an expanding region, by ensuring affordable and accessible health care.[2]

According to GK's Dr Zafrullah Chowdhury:

> *'Global institutions like the World Health Organisation and the World Bank are paying too little attention to health economics. I think European donor governments should promote, at the global level, the kind of governmental health care that works so well in their own countries. The challenge is two-fold. Services must not only become available, but affordable too. The free market does not deliver that. To cover everyone, solidarity is more important than competition. And in regard to non-communicable diseases, we must consider that availability and affordability are both long-term issues. If you are diabetic or suffer from hypertension, you must take your pills every day for the rest of your life. It is not like taking an antibiotic for a few days. People who depend on dialysis need a session every other day. Making that happen is a huge challenge.'*

The GK Dialysis Centre was opened on 13 May 2017 with the capacity to serve 400 patients a day. Haemodialysis uses a machine to replace the function of the kidneys to filter blood to remove waste products and water from the blood.

The centre is equipped with 85 of the best German-manufactured dialysis units and 15 Japanese-made units. It is the single largest dialysis facility in the country.

GK unveiled its second dialysis centre in Savar on 7 April 2019. This centre is a 25-unit dialysis facility which is equipped with modern dialysis apparatus like infection-free active endotoxin filter and is staffed by skilled bio-medical technicians, doctors and nurses. The automated dialyser machines can be used several times using a US protocol. It can record blood sugar (RBS) and blood pressure while the session is commencing.

The centre was set up to provide affordable dialysis for poor patients. The charges vary according to the economic status of the patient. GK had planned to provide dialysis for up to 25 ultra-poor patients per day for free, for 300 poor patients at 1,100 Bangladesh taka[3] per session, and for some 100 middle-class patients at BDT 1,500 per session. The actual cost per session is estimated at BDT 1,700. The plan was to have a sufficient number of rich patients who would avail of the dialysis service at BDT 3,000 per session in order to meet the deficit of approximately BDT 80,500 per day.

However, the charges have since been revised downwards so the ultra-poor continue to get free services, the poor pay BDT 800, the lower middle class BDT 1,100, the middle class BDT 1,500, the upper middle class BDT 2,500 and the rich BDT 3,000. The revisions were made to accommodate a

[2] http://www.gonoshasthayakendra.com/

[3] The current conversion rate is BDT81 for USD1.

larger number of poor patients coming from outside Dhaka city who have to spend a substantial amount on transport and having someone to escort them. GK has observed that if a patient can afford to undergo haemodialysis three times a week for three months, they can go back to work and travel without escorts to the dialysis centre.

Bangladeshi NGOs, industrialists, business houses and a host of individuals have contributed to the setting up of the dialysis centre. Dr Muhammad Yunus's Grameen Social Business has extended an interest-free loan to meet the deficit.

Dr Zafrullah Chowdhury responded to questions in February 2018[4]

What are the reasons for kidney failure?

Diabetes can cause kidney failure, and so can hypertension, skin diseases during infancy, kidney infections, frequent change of antibiotics, chemicals in food and agriculture, and kidney-toxic medicines. Heavy use of painkillers is another reason. Kidneys are small, fist-sized organs that purify blood. If kidneys fail, the person concerned needs dialysis, a treatment that requires big machines. The treatment is simple and life-saving, but it is expensive and time-consuming. Every week, a patient needs three sessions of four hours.

How many people in Bangladesh need dialysis?

About one million people do, and every year, an additional 50,000 new patients need dialysis. Many cannot afford the treatment, however. Private health-care providers charge 3,000 to 8,000 taka per session. That is roughly the equivalent of US$30 to US$80. Dialysis has to be supplemented with a haemoglobin enhancer which costs 1,800 taka per week. Blood examinations every three months cost approximately another 3,000 taka. Families struggle to make those payments. They end up selling assets like land or a house, but run out of money eventually and the patients drop out of the treatment scheme – which is their death sentence. In Bangladesh, families are on their own because we do not have a government-run national health service that covers everyone as is the case in Taiwan, Iran or Britain, for example.

What is GK's contribution?

We have set up a new dialysis centre at our hospital in central Dhaka. We have the capacity to handle 400 patients per day in four shifts. Presently we are treating on average 215 patients per day. Some of them travel from afar, up to 400 kilometres, for this purpose. We charge less than 50% of the market price. Our rates range from 800 taka to 3,000 taka. We cross-subsidise services for the poor. Our own costs are about 2,000 taka, and we hope the centre will break even in three years.

We actually treat 25 patients who are destitute entirely free of charge. But you are correct, of course, GK cannot solve all of our country's health-care problems. We do our best, setting examples of what can – and must – be done. And we are decentralising our services and will soon open two smaller dialysis centres in Sylhet and Rangpur. Moreover, we want to expand the existing centre in Dhaka.

How can GK afford such major investments?

No foreign donors are involved so far. We got support from local business people and philanthropists. I also got a discount from the German manufacturer that makes the best dialysis machines. Things could and should be easier, however. In Bangladesh, you pay 1% tax when you import industrial machines, but the rate is at least 31% for medical equipment. Moreover, philanthropic donations are not tax-deductible. We face many challenges. That said, we always welcome donations from rich nations, if people there want to support us.

[4] https://www.dandc.eu/en/article/dialysis-saves-lives-people-who-suffer-kidney-failure-so-it-must-be-made-affordable 23/2/2018

Health cover for ready made garment (RMG) workers

After the Shahriar garments collapse,[5] Tazreen Garments fire[6] and the biggest ever tragedy in the garments sector, the Rana Plaza collapse,[7] GK saw the need to provide sound and affordable health services for the low-income workers in garments factories.

A strategic paper was drawn up on providing comprehensive health care to RMG workers in Bangladesh. To make the scheme possible, GK partnered with SNV[8] - the Netherlands Development Organisation - to provide sexual and reproductive health services for women RMG workers. Subsequently, in response to demand from the workers, GK extended its services to the male workers. GK provides dental care, physiotherapy and ophthalmic care along with general health services to ensure comprehensive health care services for this low-income group.

In Bangladesh's garment industry, the workers mostly deal with general illnesses such as fever, diarrhoea and colds and some non-communicable diseases by purchasing over-the-counter medicines. Major reasons for not seeking further medical assistance are the cost, time constraints and, most importantly, not having onsite health facilities. Most factories do not have any medical doctors or nurses to care for their staff, nor are they linked with any healthcare program of the government or non-government organisations.

Therefore, the overall objective of the project is to make health services available, accessible and affordable for the workers and thus improve their health status and productivity.

The current project is funded by Weave Our Future (WOF)[9] with technical assistance from SNV.

Responsibilities of all parties for service

All parties will strive to accomplish the following activities to achieve the objectives of the project.

a) Responsibilities of GK:

1. Ensure good management of the centres and provide all promised health care services.

2. Make available all the services for all garment workers covered under health insurance. If necessary, workers will be referred to hospitals, and surgery will be done as and when necessary.

3. GK has to notify the factory one month in advance for any training program developed for the workers.

4. GK will share health information reports generated from the software to the factory on a quarterly basis.

Service delivery points

Factory level: 2 days per week by a team of MBBS doctors and paramedics.

Clinic level (Panishail): Services 24/7.

Referral hospital: GK Savar and Dhaka Nagar (Dhanmondi) medical college hospital, 24/7.

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[5] https://cleanclothes.org/news/2005/04/01/factory-collapsed-bangladeshi-garment-workers-buried-alive

[6] https://en.wikipedia.org/wiki/2012_Dhaka_garment_factory_fire

[7] https://www.ilo.org/global/topics/geip/WCMS_614394/lang--en/index.htm

[8] SNV stands for Stichting Nederlandse Vrijwilligers

[9] https://weaveourfuture.org/en/the-foundation/. WOF works to improve working conditions within industries in developing countries, particularly within the textile industry, as well as living conditions for workers and their families.

b) Responsibilities of factory:

The factory management will:

1. Agree to the proposed premium

2. Organise to share as per clauses 6 and 7

3. Provide support to GK to enrol the workers of the factory under the health scheme

4. Participate in sensitising meeting, quarterly meeting organised by GK

5. Allow the factory workers to participate in different training/awareness programs organised by GK

6. Provide instruction to the factory medical centre to refer workers to GK health facilities

7. Share business indicators like absenteeism, migration, sick leave and productivity-related data with GK for study purposes for the project period

8. Cooperate with GK in conducting surveys and research in the factory regarding the scheme.

c) Services covered by the health insurance scheme:

Under this scheme, a beneficiary can access health care facilities of up to a value of 25,000 taka at the selected health care centres by paying an annual premium of only 600 taka (US$6).

On this basis, workers would still be charged small sums for individual services. GK's experience is that people do not value services unless they pay, but the costs must not be prohibitively expensive.

This scheme also offers access to 24-hour hospital services, pharmacy and ambulance facilities. All the services are provided in GK facilities. Services cannot be claimed in other clinics or hospitals.

This is not insurance in the business sense. Premiums are not calculated according to individuals' personal health risks. Instead, social insurance is based on solidarity, with people contributing money according to their ability, not their medical needs.

d) Services not covered by the health insurance scheme:

A long list[10] of more chronic or complicated problems are not covered.

[10] https://gonoshasthayakendra.com/project/health-insurance-pilot-project-for-rmg-worker-in-bangladesh/

GK's programmatic interventions in response to COVID-19[11]

During any kind of national and international disaster, GK tries to respond as early as possible through rescue, medical services, reconstruction of damaged houses, and distribution of food, including safe drinking water.

As the COVID-19 pandemic continues, GK has activated 'Gonoshasthaya Kendra's Emergency Response to Combat COVID-19'. Through this initiative, GK is working 24/7 in various fields.

COVID-19 response support

- Development of rapid test kit to detect the coronavirus (awaiting government approval)
- Emergency food assistance program for vulnerable families
- Social awareness raising via distribution of flyers and leaflets on COVID-19
- Designated 'flu corner' at various GK hospitals
- Corona Call Centre
- Call centre for physiotherapy patients
- Emergency blood management service
- Establishment of hospital and community-based handwashing corners
- Provision of protective gear for government facilities and GK health care centres
- 15-bed COVID-19 dedicated ICU facility at Gonoshasthaya Nagar Hospital, Dhanmondi (under construction)

Treating COVID-19 patients: Gonoshasthaya at their doorstep

Sadi Muhammad Alok

In August 2020, Gonoshasthaya Kendra started an initiative to treat coronavirus patients at their homes with mobile medical teams, in four areas of the capital, Dhaka.

The Gonoshasthaya Kendra Mobile Corona Medical Services also collect samples from people with coronavirus-like symptoms from their homes in Dhanmondi, Kalabagan, Old Dhaka and Mirpur.

Dr Zafrullah Chowdhury, founder and trustee of GK, explained that GK's medical officers will visit homes in ambulances for COVID-19 patients who call the institution or book the service using a special app. The service is currently being provided every day from 9 am to 8 pm, he said. There are two types of services they can provide through home visits - firstly, carrying out tests on a large scale, and secondly, if any COVID-19 patient calls them, their medical team will go to the patient's residence and provide the necessary management.

Dr Chowdhury said the ambulance that visits the COVID-19 patients' houses has an X-ray, ECG machine, a ventilator and all other necessary equipment. The three response teams include senior and junior physicians, nurses, pathology technologists, physiotherapists and volunteers. He said the mobile medical team will not charge any fees for their services and will charge about half the cost of other tests, including the COVID-19 test.

The medical team conducting house visits is also accompanied by a motorcycle – the rider will return to the hospital with the X-ray cassette and/or a potential COVID-19 patient's sample.

COVID-19 patients are divided into four categories according to the symptoms they are exhibiting. These are: mild, tolerable, tolerable with co-morbidities (diabetes, heart or kidney disease, stroke, asthma, etc) and severe.

[11] https://bdplatform4sdgs.net/gonoshasthaya-kendra-in-rsponse-to-COVID-19/

If a patient tests positive for COVID-19, any necessary medicine will be sent to his or her residence and necessary treatment and support will be provided. The first three types of patients can be treated at home but patients exhibiting severe symptoms will be transferred to the hospital.

Treatment is according to WHO guidelines. All chest X-rays, ECG and all the tests that need to be done will be carried out; in other words, a hospital will go to a corona patient's house.

- The doctor will go through any X-ray images on their mobile phone.
- The technician will collect blood samples for necessary tests.
- If oxygen is needed, the nurse will train the patient and his or her relatives in the use of oxygen cylinders and pulse oximeters.
- If necessary, plasma treatment will be arranged at home.

Dr Chowdhury told *The Daily Star* that the government had not taken the necessary precautionary measures regarding COVID-19 treatment.

> *'I have been saying from the beginning that oxygen is most needed for COVID-19 patients. We can easily produce that oxygen ourselves. It costs around Tk 30 crore (about US$350,000) to build a small oxygen plant, and it is not difficult for the government to spend [that amount]. If the money is given to the hospitals as a grant, they can produce oxygen as per their requirement.*
>
> *'At the same time we from GK will teach other people associated with the COVID infected patient how to measure temperature, blood pressure and oxygen level. We will provide this service from door to door, so that the crowd in the hospital is reduced and the panic among the people is also reduced.'*

Dr Chowdhury said there is no alternative to standing by the people amid the detariorating COVID-19 situation. He added that positive results will be visible 15 to 30 days after commencement of the door-to-door treatment.

Phone numbers are provided to access the medical services of the GK mobile medical team. This facility is also available through the CodeRed SOS app.