

Affordable Health Care: Gonoshasthaya Kendra (GK) Experiences with Social Class Based Local Health Insurance (HI) in Rural Bangladesh *

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Health Expenditures and Poverty

Expenses for visiting clinic and/or out-patient facilities, consultation with healthcare providers (Physicians, health workers, village practitioners), investigations, medicines, hospitalization and surgical interventions if required including extra payment to procure services at public sector facilities constitutes 'Health Expenditures' (HE) which directly affects consumer expenditures and saving of poor and not so rich families. Poorest people are worst sufferer of exploitative, inefficient and costly out of pocket (OOP) payments.

In India, 78% of Health Expenditures (HE) is from out of pocket (OOP) and purchasing of drugs alone accounts for 72% of OOP². Price of controlled medicines rose by 0.02% and Listed Essential Drugs (also price controlled by Government of India) rose by 15% while drugs not under price control regime grew by 137%.²

78% cases for declining economic status is due to health and health related expenses³ 'Accountable health care facilities might be a core element for reducing poverty in this region'. India has 640 district hospitals, 5000 community health centres, 23000 primary health centres and over 1,60,000 sub centres.

Continuation and Descents into poverty in Bangladesh is associated with high expenditures for ill health and crisis of natural disasters and personal insecurity.^{4,5}

Despite of large number of public sector health facilities-64 district hospitals, 470 Upazila (sub-district) Health Complex, 5000 Union Health and Family Welfare Centres and over 11000 community clinics in rural Bangladesh, local population is deprived of affordable basic health care due to absenteeism of physicians and their unhindered private practices leading to mushrooming of unregulated private clinics.

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Even in USA, 50 million residents have no adequate health coverage⁶, and in many instances, catastrophic health expenditures leads to family bankruptcy,⁷ in spite of national annual health expenditure of US \$ 2.4 trillion in 2008 equivalent to 17% of GDP⁸.

It is obvious that Alma Ata's dream for 'Health for All by the year 2000'⁹ had not materialized. People's Health Movement continues the Struggle¹⁰ to materialize WHO's dream in the near future.

However, Universal Health Coverage functions well in Cuba, Taiwan, Thailand, Iran, former socialist countries and some capitalist countries.

Gonoshasthaya Kendra (GK)

Gono means People, Shasthaya means Health, Kendra means Centre



Gonoshasthaya Kendra (GK), a local not for profit Charitable Foundation was established in April 1972. Most of GK's founders were involved in the treatment of wounded freedom fighters and refugees from Bangladesh (the then East Pakistan) during liberation war against Pakistan in 1971.

During the war, they realized that doctors alone cannot run good clinic and hospital. They need large number of helping hands (i.e Health Workers/Paramedics). Young people specially women irrespective of education level learn fast and can provide excellent health care.

GK had started health literacy, family planning and curative care in 20 villages of Savar in 1972. Work has now extended to 647 villages in 43 locations of Bangladesh.

Villagers organised many meetings in different places to discuss their health needs and ways to finance. Rich people donated land, poor provided voluntary labour.

Many families donated building materials such as bamboo, jute strings, trees and corrugated iron sheets etc. Villagers thought of health centres like mosque where everybody should have easy access to health services, preferably free for the poor and needy.

Concept of health cooperative was evolved and a flat rate of Taka 2 per month per family as membership fee was decided in 1973 (Taka 24/year = US \$ 1.5 at the prevalent conversion rate of 1 \$ = Taka 18)

Since 1973, community was classified as poor, middle class and rich. Villagers also realized that recruitment of enough doctors is not possible. They agreed with the concept of young health workers mostly women trained locally. Female workers have easy access into village homes.

Paramedics:

Accordingly, GK recruited large number of young women with 6-10 years of education and trained them in the community and at the centre for preventive immunizations, safe drinking water, sanitation, nutrition and agriculture, reproductive health Care (Family Planning, Antenatal and Postnatal care, safe home delivery with trained Traditional Birth Attendants-TBAs, immediate breast feeding) and some curative care. They also learn indications, contra indications and price of 50 frequently used essential medicines.

Young recruits are named as “Paramedics”. They are also trained in simple basic surgery including Menstrual Regulation, microscopy and some laboratory methods for blood, stool, urine tests and diagnosis of Tuberculosis, Diabetes, hypertension, pneumonia and causes of maternal and infant mortality. All paramedics, female and male learn bicycle riding.

They learn to find inequality in the society and different societal classes. Basis of social classification are described in another GK publication¹¹. Indian experience shows that proper identification of vulnerable groups is most crucial for proper allocation of scarce resources through government allocations.³

Training period for paramedics varies from 6 to 18 months, at the centre and in the community. They are much better trained than Chinese bare foot doctors’ of 1970s-80s. Training and scope of work of GK Paramedics are closely similar to Iranian Health Care Workers ‘Behvarz’¹²

GK paramedics are also given training for disabled and elderly care and in disaster management. GK’s integrated health programme was one of the three case studies that were presented at the International Conference of Primary Health Care, held at Alma Ata, USSR from September 6-12, 1978¹³



Health workers going to the village to provide elderly care

Social class based Health Insurance (HI)

: A tool for Health for All

5 social classes were decided in late 1990s. Parameters considered for such classifications were family size (destitute and ultra poor have fewer family members and often female headed households), family asset, availability of electricity, water, sanitation, homestead area, domestic animals, fruit trees, access to market, school, government health clinic, local government offices etc, food consumption, occupation, income, social security and credit worthiness.¹¹

These parameters are recently described as human Assets, physical assets, natural assets, financial assets and social assets by economist Binayek sen⁴

In appreciation of upward mobility of some poor families and descends of few middle class in recent years a new category – **‘lower middle class’** is added to social classification from current Bangla year 1419 (Corresponding to April 2012-2013).

In consultation through many village meetings, it was decided that each family will pay a basic health cooperative membership fee and fee for each curative services. Paramedics promote the need for Health Insurance (HI) and universal coverage. They also collect HI premium during their visit in the community.

HI Premium is based on social classes, smoking habit and location of residences. 4 distinct groups emerged – Living in Dhaka City; Living close to city as in Savar, distant villages and in reverine chars (Islands)

Every family whether has Ill or not will get full preventive PHC including reproductive health care free of charge. However, for curative services, non-insured family has to pay higher charges than the rich family with HI would pay.

Annual premium for HI and price kilogram of commonly consumed food items are shown in Table-1 entitlement of HI subscribers are mentioned in Table-2 and rate of fees for consultation and investigations, please see table 3+4.



Paramedics providing ANC and PNC at village home

Outcomes and benefit for community

In spite of nominal annual premium for HI with so many years' struggles, only 94936 families (37.96%) out of 250,063 families have accepted social class based health insurance.

Slow achievement of HI is firstly due to new concept of HI, secondly people perceives that health care should be available free of charge and thirdly, consumer is doubtful whether services will be available at the right moment with such low fee and charges. Moreover, government is reluctant to promote HI as it is not backed by WHO, UNICEF, UNFPA and other donor agencies. There is no chance for government officials of getting some perks from social class based health insurance.

Some benefits accrued by community are mentioned in Table – 5.

Poor families used services of GK more than rich and middle class. 100% destitute and ultra poor and 54% poor have accepted HI while only 6.18% rich and 42% middle class families have paid for HI.

Benefit is prominent in case of reproductive health care, IMR and MMR among all social groups. GK programme areas have highest 84% safe normal delivery at home and much lower IMR and MMR than National achievement.

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**Table-1: GK Social Class Based Family Health Insurance: Annual Premium for Health Cooperative
Bangla year (14 April 2012 – 13 April 2013)**

Social Class	Urban Area				Upazilla & Villages Near Dhaka City		Distant Villages		Remote River Island		Annual fees for Extra members at Savar, Rural & Char Health Areas Family Health Insurance	
	1. GonoshasthayaNagarHospital-Dhanmondi		Urban Health		Savar Health		Rural Health		Char Health			
	2. Gonoshasthaya Nagar Hospital –Mirpur		Family Health Insurance		Family Health Insurance		Family Health Insurance		Family Health Insurance			
	Single Person Health Insurance											
	Non-Smoker	Smoker	Non-Smoker	Smoker	Non-Smoker	Smoker	Non-Smoker	Smoker	Non-Smoker	Smoker	Non-Smoker	Smoker
I. Destitute	Tk. 30	40	60	70	20	25	15	20	10	15	5	10
	\$ 0.38	0.50	0.75	0.88	0.25	0.31	0.19	0.25	0.13	0.19	0.06	0.13
II. Ultra poor	Tk. 40	50	90	100	25	30	20	25	15	20	5	10
	\$ 0.5	0.63	1.13	1.25	0.31	0.38	0.25	0.33	0.198	0.25	0.06	0.13
III. Poor	Tk. 100	125	200	220	50	60	40	50	30	40	10	15
	\$ 1.25	1.56	2.5	2.75	0.63	0.75	0.5	0.63	0.38	0.50	0.13	0.19
IV. Lower Middle class	Tk. 200	225	350	400	80	90	60	70	40	50	15	20
	\$ 2.5	2.81	4.38	5.00	1.00	1.13	0.75	0.88	0.50	0.63	0.19	0.25
V. Middle class	Tk. 350	400	700	800	100	120	70	80	50	60	20	25
	\$ 4.38	5	8.75	10.00	1.25	1.5	0.88	1.00	0.63	0.75	0.25	0.31
VI. Rich	Tk. 900	1000	1800	2000	125	150	90	100	60	70	30	35
	\$ 11.25	12.5	22.5	25	1.56	1.89	1.13	1.25	0.75	0.89	0.38	0.44

* Gonoshasthaya Health Insurance (HI) for Single member is only available in Dhaka City, not in other areas.

1 US \$ = Bangladesh Taka 80.

**** Price of Commonly used Foods per Kilogram. (BD Taka/US\$)**

Rice / Flour : Tk. 30/= \$ 0.38	Cooking oil : Tk. 130/= \$ 1.63	Vegetables : Tk. 40/= \$ 0.50
Sugar : Tk. 50/= \$ 0.63	Salt : Tk. 20/= \$ 0.25	Onion : Tk. 30/= - 70/= \$ 0.38-0.88
Fish : Tk. 130/= \$ 1.63	Beef : Tk. 300/= \$ 3.75	Chicken : Tk. 160/= \$ 2.00

Table- 2: Entitlements of GK Rural HI Subscribers Service charges are shown in Bangladesh Taka-BDT (US Dollar \$)

Details of Services	Social classes						Non-insured
	Destitute	Ultra poor	Poor	Lower Middle Class	Middle Class	Rich	
I. Preventive Care							
1. Immunizations	Free	Free	Free	Free	Free	Free	Free
2. Antenatal Care	Free	Free	Free	Free	Free	Free	Free
3. Post Natal Care	Free	Free	Free	Free	Free	Free	Free
4. Participation in Bau-Shashuri mela*	Free	Free	Free	Free	Free	Free	Free
5. Nutritional and Sanitation Education	Free	Free	Free	Free	Free	Free	Free
II. Safe Normal child birth at home with TBAs and paramedics	Free	Free	Free	Free	Some gift given to TBAs	Some gift given to	Some gift given to TBAs
III. Elderly Care							
1. Checking BP, Eye sight, Dental Care, shortening and cleaning of Nails	Free	Free	Free	Free	Free	Free	6 (us 0.075 Cents)
2. Participation in Annual elderly sports and entertainment an enjoyable public event	Free	Free	Free	Free	Free	Free	20 (us 0.25 Cents)
IV. A Endance at Child and Maternal Death Audit	Free	Free	Free	Free	Free	Free	Free

Public gatherings of daughter-in-Laws and mother-in-Laws This is an hilarious annual event.

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Table-2: Entitlements of GK Rural HI Subscribers

Details of Services	Social classes						Non-insured
	Destitute	Ultra poor	Poor	Lower Middle	Middle Class	Rich	
V. Disabled Care (BP Checking, Eye sight , Dental status, cleaning and shortening of nails etc.	Free	Free	Free	Free	Free	Free	Free
VI. 1. Family Planning services except surgical Interventions	Free	Free	Free	Free	Free	Free	Free
2. Menstrual Regulation (Abortion up to 9 weeks)	Free	Free	100 \$ 1.25	150 1.875	250 \$ 3.125	400 \$ 5	500 \$ 6.25
VII. Nutrition Improvement with vegetable seeds distributions	Free	Free	Free	cost of seeds	cost of seeds	cost of seeds	cost of seeds
VIII. Community Physiotherapy	Free	Free	20 \$ 0.25	30 0.375	40 \$ 0.5		70 \$ 0.875
IX. Curative Care							
1. Consultation with paramedics in the village	Free	Free	Free	Free	8 0.1		15 0.188
2. Consultation at the centre with GP	Free	Free	Free	15 \$ -	20 \$ 0.25		50 \$ 0.625
3. Treatment for Headline in the Village	Free	Free	Free	5 \$ 0.0625	7 \$ 0.088	10 \$ 0.125	15 \$ 0.188

Table -3: Consultation fee & Medicine cost in Bangladeshi Taka (US Dollar)

Social Class	General Practitioner (GP) Consultation				Specialist Consultation				Medicine Cost			
	Urban Hospital	Savar Health	Rural Health	Char Health	Urban Hospital	Savar Health	Rural Health	Char Health	Urban Hospital	Savar Health	Rural Health	Char Health
1. Destitute	Taka	Free	Free	Free	Taka	Free	Free	Free	Free	Free	Free	Free
	US\$	Free	Free	Free	US\$	Free	Free	Free	Free	Free	Free	Free
2. Ultra poor	Taka	Free	Free	Free	Taka	Free	Free	Free	Free	Free	Free	Free
	US\$	Free	Free	Free	US\$	Free	Free	Free	Free	Free	Free	Free
3. Poor	Taka	Free	Free	Free	Taka	50	30	25	20	100% MRP	80% MRP	80% MRP
	US\$	Free	Free	Free	US\$	0.63	0.38	0.31	0.25	100% MRP	80% MRP	80% MRP
4. Lower middle class	Taka	Free	Free	Free	Taka	100	50	N/A	N/A	100% MRP	100% MRP	100% MRP
	US\$	Free	Free	Free	US\$	1.25	0.63	N/A	N/A	100% MRP	100% MRP	100% MRP
5. Middle class	Taka	40	20	15	10	Taka	150	100	50	75	100% MRP	100% MRP
	US\$	0.50	0.25	0.19	0.16	US\$	1.88	1.25	0.63	0.94	100% MRP	100% MRP
6. Rich	Taka	50	25	20	15	Taka	200	150	75	100	100% MRP	100% MRP
	US\$	0.63	0.31	0.25	0.19	US\$	2.50	1.88	0.94	1.25	100% MRP	100% MRP
7. Non Insured	Taka	60	50	25	25	Taka	400	300	150	150	100% MRP	100% MRP
	US\$	0.75	0.63	0.31	0.31	US\$	5.00	3.75	1.88	1.88	100% MRP	100% MRP

* US Dollar 1 = Taka 80

** MRP = Government approved Maximum Retail Price includes 15% VAT

Table- 4: Rational Investigations in Rural GK Hospitals & Clinics in Taka / US \$

Social Classes	Pathological Examinations										Radiological Examinations			Basic Cardiology	
	Routine Blood Tests	Blood Group	Random Blood Sugar	Lipid Profile	Malaria	ASO Titre	Culture Sensitivity	PEPS Smear	Routine stool	Routine Urine	General X-ray	Dental X-ray	Ultrasono	ECG	ECHO
Destitute	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free
Ultra Poor	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free	Free
Poor	30	40	20	100	Free	50	50	Free	10	20	50	30	100	50	200
	\$ 0.375	0.5	0.25	1.25		0.625	0.625		0.125	0.25	0.625	0.375	1.25	0.625	2.5
Lower Middle Class	40	50	30	150	25	60	100	100	20	25	70	50	200	100	400
	\$ 0.5	0.625	0.375	1.875	0.3125	0.75	1.25	1.25	0.25	0.3125	0.875	0.625	2.5	1.25	5
Middle Class	50	60	50	200	30	100	125	125	30	30	90	75	300	125	600
	\$ 0.625	0.75	0.625	2.5	0.375	1.25	1.562	1.562	0.375	0.375	1.125	0.937	3.75	1.562	7.5
Rich	60	70	70	250	40	150	150	150	40	40	100	100	400	150	700
	\$ 0.75	0.875	0.875	3.125	0.5	1.875	1.875	1.875	0.5	0.5	1.25	1.25	5	1.875	8.75
Non Insured	70	80	80	300	50	200	200	200	50	50	150	150	500	175	800
	\$ 0.875	1	1	3.75	0.625	2.5	2.5	2.5	0.625	0.625	1.875	1.875	6.25	2.187	10

Bangladesh Taka 80 = US Dollar 1.

Table-5

Community derives benefit from HI
Health Service received at the community and at health centers-
Bangla year 1418 (April 2011- April 2012)

Indictors	Social classes						Total Non Insured	Grand Total
	Destitute	Ultra poor	Poor	middle class	Rich	Total		
Population	1,944	17,713	748,145	329,693	52,277	1,149,772	-	1,149,772
No of Families	1,029	4,118	113,099	68,466	8,443	250,063	155,127	
No. of families accepted GK health Insurance	1,029	4,118	60,661	28,606	522	94,936	155,127	250,063
% of Families Insured (HI)	100.00	100.00	53.64	41.78	6.18	37.96	62.04	37.96%
* Curative Care at the community	2,168	6,826	34,335	10,469	2,050	55,848	17,327	73,175
% of Social classes of Population	111.52	38.54	4.59	3.18	3.92	4.86	-	6.36
% of total patients	3.88	12.22	61.48	18.75	3.67	76.32	23.68	100%
* Curative Care in Health Centers	1,599	9,395	86,997	33,035	6,139	137,165	33,973	171,138
% of Social Class Population	82.25	13.52	8.96	10.02	11.74	9.58	-	14.88
% of total patient	0.93	1.40	39.15	19.30	3.59	64.37	35.63	100%
Total Patient in the community & Health Centers	3,767	9,221	101,332	43,504	8,189	166,013	78,300	244,313
% of Social Class Population	193.78	52.06	13.54	13.20	15.66	14.44	-	21.25
% of total patients	1.54	3.77	41.48	17.81	3.35	67.95	32.05	100%
Preventive Care: Immunizations								
No. of Infant from 0 to 1 year	3	379	11,561	5,082	806	17,831	6,786	24,617
No. of immunization completed (%)	3	313	9,530	4,190	665	14,701	5,593	20,294
No. of women (15 - 49) years	392	5,724	129,645	60,060	10,959	206,780	78,035	284,815
TT dosage completed	171	2,501	56,642	26,240	4,788	90,342	34,094	124,436
Reproductive Health Care								
Total Eligible Couple	45	1,895	99,122	42,659	6,363	150,084	57,613	207,697
Family Planning Practice	8	856	68,502	25,557	6,105	100,164	39,817	139,981
Family Planning Acceptance %	18	45	69	60	96	67	69	67
Total Pregnancy	-	53	9,973	2,457	184	12,667	4,894	17,561
Ante Natal Care	-	51	9,383	2,236	163	11,833	4,248	16,081
% of ANC by Total Pregnancy	0.00	96.23	94.08	91.01	88.59	93.42	86.80	91.57
IMR/1000 live birth	0.00	0.00	15.13	6.66	0.00	13.34	0.00	13.34
Post Natal Care	0	36	7,749	1,741	133	9,659	3,741	13,400

Deliveries attended at home (% of Total Deliveries)	0	33 (91.67%)	6,623 (85.47%)	1,420 (81.56%)	91 (68.42%)	8,167 (84.55%)	3,123 (83.48%)	11,290 (84.25%)
Deliveries at GK Center (% of Total Deliveries)	0	2 (5.56%)	556 (7.18%)	105 (6.03%)	6 (4.51%)	669 (6.93%)	268 (7.16%)	937 (6.99%)
Deliveries at Private Clinic (% of Total Deliveries)	0	0	237 (3.06%)	121 (6.95%)	30 (22.56%)	388 (4.02%)	160 (4.28%)	548 (4.09%)
Deliveries at Govt. Hospital (% of Total Deliveries)	0	1 (2.78%)	333 (4.30%)	95 (5.46%)	6 (4.51%)	435 (4.50%)	190 (5.08%)	625 (4.66%)

13,400

Total Maternal Death	0	0	6	1	0	7	4	11
MMR/100,000 live birth	0.00	0.00	78.79	57.80	0.00	73.68	108.25	83.36
Total Neonatal Death	0	0	32	7	0	39	74	113
NMR/1000 live birth	0.00	0.00	4.20	4.05	0.00	4.10	20.03	8.56
Total Infant Death	0	0	58	9	0	67	109	176
IMR / 1000 live birth	0	0	7.62	5.20	0	7.05	29.50	13.34

National Data

Family Planning Practice	Data	Year	Source
Family Planning Acceptance %	61%	2011	SMC
NMR/1000 live birth	37.00	2007	BDHS
IMR/1000 live birth	49.00	2010	Demographic Bangladesh (Wikipedia)
MMR/100,000 live birth	194.0	2010	NIPORT