

ESTABLISHMENT OF A NATIONWIDE CHRONIC DIALYSIS PROGRAMME UNDER PUBLIC PRIVATE PARTNERSHIP (PPP)

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Introduction

Chronic kidney disease (CKD) is one of the non-communicable diseases which affect ~10% of population of Bangladesh¹. CKD is a progressive disease which ends at end stage renal disease (ESRD) when patients fail to survive without dialysis or any other renal replacement therapy (RRT). Incidence of ESRD is 10 /million (1600 new ESRD patients/yr) but only 20% of them have ability to purchase RRT. Modalities of dialysis are In-center haemodialysis/Home Haemodialysis/CAPD. In Bangladesh 100% is center based Haemodialysis.

Facilities of Haemodialysis centers are limited. But demand vs availability for HD centres is quite high. In this context there is scope of establishing HD centers at sites where human resources is available. Novel forms of funding chronic dialysis programme is urgently required in order to address the increasing burden of ESRD. The formation of public-private partnerships was found to yield successful improvement in infectious disease control in our country. So there is also scope of PPP in providing dialysis by establishing numerous paradigms of partnerships with other non-governmental institutions and healthcare institutions in order to create a nationwide Chronic Dialysis Programme.

This partnership may be based on combined governance, product focused, service oriented with division of nature of activities (like consultation vs operational.).

Two of the most recognized successful illustration of global partnerships are the Mectizan Donation Program and the International Trachoma Initiative². The Mectizan Donation Program is a partnership between Merck Pharmaceuticals and the Task Force for Child Survival in order to systematically donate ivermectin for the control of a debilitating condition, onchocerciasis, which if left untreated leads to blindness.

As a result of this program, it is estimated that 200,000 individuals have been prevented from becoming blind. Furthermore, the drug's use in over 11 African nations is thought to have resulted in a significant reduction in transmission rates of onchocerciasis^{3,4}. Similarly, the International Trachoma Initiative (ITI) was a partnership formed between the Clark Foundation, traditionally a research funding body, and Pfizer Pharmaceuticals, in order to make azithromycin widely available for the control of trachoma, another condition that leads to blindness and is highly prevalent in African, Middle Eastern and certain Asian nations⁵. In this partnership both the sectors had specific benefit. For Pfizer or Merck, the specific goal is increased visibility or an enhanced public image that may indirectly result in an increase in sales of unrelated products, whereas for the Task Force for Child Survival or the Clark Foundation, the primary goal is actual provision of the specific drug.

In our country the concepts of public-private partnership have traditionally been applied predominantly to infectious diseases. But the same strategies can be an effective means to address the chronic Dialysis Programme to provide affordable renal replacement therapy.

Because of the rising annual incidence of ESRD in Bangladesh, only establishment of Dialysis centre will not solve the problem in Bangladesh. We should focus to include the prevention of kidney disease and its associated chronic diseases. Stepwise primary, secondary and tertiary prevention initiatives were designed to address obstacles to care at each stage in the development of kidney disease among individuals at risk for the development of ESRD. These include nationwide surveillance for urinary abnormalities, hypertension, diabetes and other recognized risk factors for kidney diseases. Bangladesh Renal Association and Bangladesh Association of Urological Surgeons are two organizations who can develop a countrywide network to provide secondary screening for detected abnormalities as well as comprehensive team-based care for patients with known diabetes and hypertension. Both short- and long-term clinical and economic outcomes are to be monitored in order to evaluate the efficacy of this comprehensive prevention program. Furthermore, clinical data derived from the surveillance, as well as the intervention program, may be analyzed and incorporated as the prevention program.

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Key words

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Partnership with corporations

To provide highly standardized chronic dialysis it is needed to work with strategic partners that could share the risk involved with establishing such a program on a massive scale. In the early stages of this program, the natural choice for partners would be pharmaceutical companies that are actively engaged with manufacturing and marketing of dialysis-related products. Companies such as B Broun, Fresenius, Inc. and Baxter, Inc. are now supplying most of running dialysis machines in Bangladesh. Partnership may be formed with them in order to provide dialysis machines at much reduced cost. This not only involve the provision of equipment related to dialysis, but also to be included the development of active training programs for both allied health professionals and patients. Other pharmaceutical companies, Janssen-Cilag and Roche may be taken as a partner in its attempt to ensure the widespread availability of erythropoietin for chronic dialysis patients. Through this partnership, ESRD patients can purchase erythropoietin at less than 50% of market costs. This interest in continued partnership has been further enhanced by the demonstration of concrete benefits for both sides of the partnership. For instance, through the partnership with Janssen-Cilag, the foundation benefits by providing its patients with an otherwise unaffordable drug, erythropoietin; while for Janssen-Cilag, the improved public relations may translate to potentially improved sales even for unrelated products. These companies are involved in PPP in other countries like India, Singapore and other countries. If we had an aim to establish at least two dialysis centers in each of seven divisions and to build one dialysis unit each year, GOB can expand programme by incorporating other companies like Private Airlines, different Telecommunication companies among others. For each of these partnerships, capital and recurrent costs of establishing the dialysis unit may be provided by the private corporation, whereas GOB will be responsible for developing the infrastructure, providing the technical knowledge, and fulfilling the manpower needs of the facility. Each partnering corporation is involved further with clinical and rehabilitation outcomes monitoring of the respective dialysis unit. Thus, by identifying private corporations with a "social conscience," GOB can ensure the availability of chronic dialysis treatment. In return, the private institution is ensured the transparent and appropriate handling of funds to achieve the collaborative mission of providing dialysis care.

Furthermore, their partnership with the GOB will enhance their public image as a company that exemplifies the best norms of philanthropy, which may indirectly result in an improvement in the private corporation's own business.

We should make the dialysis population not as terminally ill patients like living on oxygen therapy, rather we have to make them physically active population to contribute to the society as well as self-dependent to carry their own cost of treatment. So, we have to rehabilitate them and for this we have to make partnership with different business group for employment, so Govt has to develop "job connection Programme".

Partnership with healthcare institutions

GOB may establish collaborative relationships with healthcare institutions in the country and outside. For Examples, Square Hospitals, Labaid Hospital, United Hospital and Appollo Hospitals may be offered for partnership. Non-Government Hospital-based nephrologists may be included as part of the staff that provides direct patient care to dialysis patients.

Partnerships with other non-governmental organizations

The Govt. may recognize formation of partnerships with other non-governmental organizations like NGOs, Rotary club, Bangladesh Kidney Foundation and organized religious groups. Degrees of partnership vary according to the specific project rather than to the partnering institution like contributing to screening programme and mass communication rather than funding for infrastructure.

Partnerships with private individuals

Actually strongest forms of partnerships involve its relationship with the general public. Regular personal communication with the country's total population as much as possible is ensured by traditional business principles of customer relationship marketing. This may be ensured by telephone conversation, e-mail or direct mass mailing. Fundamental to maintaining this partnership with the general public is the maintenance of transparency in the handling of funds and by giving an "Investment Report" annually to the private individual donor.

Role of GOB

Will provide the following items-

1. Space for dialysis set up
2. Power supply
3. Water supply
4. Nephrologists & on-duty doctors
5. Quality Assurance

Special

Role of Private Investor

Will provide the following items-

1. Dialysis Machines and CRRT machine
2. Water Treatment plant
3. Dialysis Bed
4. Technical Supports related to Dialysis Machines
5. Nurses
6. Biomedical Engineer
7. Dialysis Technicians
8. Office and other staffs like Cleaners, Ward boys etc.

Responsibilities

GOB will be responsible for ensuring-

1. Qualities control of Dialysis Service.
2. Monitoring of patients on maintenance HD.
3. Maintenance of infection control protocols.
4. Consultation services by Nephrologists and doctors.
5. Manpower training and development.
6. Emergency Medical Services.
7. Uninterrupted supply of power and water.

Private investors will be responsible for

1. Uninterrupted service of dialysis facility.
2. Ensuring service of Nurses, Technicians and office staffs.
3. Regular supply medical and surgical requisites (MSR) for dialysis CRRT machines.

Conclusion

Chittagong Medical College Hospital with provision of only nine haemodialysis beds. Since the cost is less and the infrastructure facilities are better, renal failure patients usually first come to CMCH for dialysis. Although some private hospitals have some dialysis facilities but majority poor renal failure patients can't afford it because of high cost. Due to shortage of dialysis facilities in Govt. hospital and due to unaffordability in private hospital, majority renal failure patients are dying without indicated life saving dialysis. So in Chittagong there is an urgent need of opening haemodialysis centres with more machines and beds. PPP in health sector is important and timely in light of challenges the public sectors facing in health care finance, management, and dispensing. Due to largely fiscal constraint Govt. force to prioritize and restrict public expenditure. Moreover many public health systems are already indebted and face further fiscal pressure. So, Public private partnership can set up international standard haemodialysis centers if proper initiative is taken.

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