CURRENT SITUATION OF HEMATOPOIETIC STEM CELL TRANSPLANTATION IN BANGLADESH

Prof. M.A.Khan,

MBBS, FCPS, FRCP(Edin)

Department of Hematology

Dhaka Medical College & Hospital

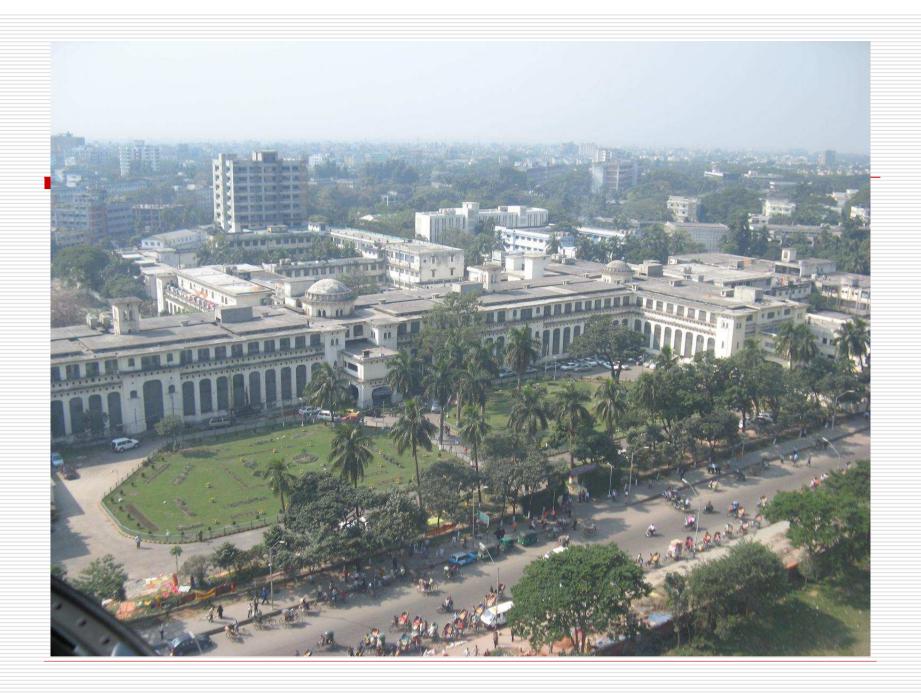




- Area: 1,47,570 sq.km. or 57,295 sq.miles.
- Population: about 140 million
- Densely populated country
- Population increasing at 1.3% annually.
- Per capita income is around \$850



Medical College / post graduate/specialized hospitals **District hospitals: (63) MCWCs (93)** Thana Health Complexes (349) **UHFWCs (3187)** Community clinics, Dispensaries, FWAs and NGO Field Workers 30,000 satellite clinics every month







Hematology Ward (44), DMCH





6 years Statistical profile

Year	Out-Patients	In-Patients	Day-Care	Laboratory	Comment
2005	454	305	204	CBC & PBF: 4,015 B.Marrow: 318	starting year
2006	2058	204	498	CBC & PBF: 3,292 B. Marrow: 465	In-pts. Stay for 2-4 weeks.
2007	2562	358	723	CBC & BF: 4,585 B.Marrow: 635	Limited beds for in-Pts.
2008	4,526	462	1,790	CBC & PBF: 7,986 B. Marrow: 842 Trephine biopsy: 08	Limited beds for in-Patients.
2009	5,405	559	2,462	CBC & PBF: 10,09 B. Marrow: 758	40-45 pts/day remain admitted
2010	5825	502	3174	CBC & PBF: 7,725 B. Marrow: 1,266 Trephine biopsy: 52	Updating needed

Thalassaemia in Bangladesh

Carrier status

WHO reports that there are 3% carriers of β thalassaemia trait and 4% carriers of Hb E trait in Bangladesh.

Accordingly about 4.2 million β-thalassaemia carrier and 5.6millions are E-carrier.

But we are suspecting that now the figures are more higher.





Does a developing country need a transplant unit?

YES

- There are rich people in developing countries
- They will go abroad for BMT
- If transplant is done in the country, resources will remain locally
- Expertise developed, that will impact other services

DEVELOPING A BONE MARROW TRANSPLANT PROGRAM IN BANGLADESH

Initiative already taken

- Govt has the willinglingness to set up BMT in public sector.
- Nobel lauriate Prof. Yunus singed a memorandum to set up a BMT center for children.

Resource Available

- Hematology department in five medical college
- Experience in chemotherapy including high dose chemotherapy
- Availability of advanced laboratory services in out reached centre/private sector.

Resource needed

- □ To develop Molecular laboratory
- □ To up-grade transfusion services
- Skilled transplantion team

Plan

Initial Phase (1-2 years):
Autologus transplant

Final phase:
Allogeneic transplant



Co-operation

Man power training:
Tehcnical assistance
Twining program
Research initiative

Govt has limited budget



Thank You





Workshop of the WBMT in cooperation with the WHO

●Country Name : Peoplie's Republis of Bangladesh					
● Is there a transplant team in your institution? No					
 If yes, total number of transplants performed Related BM:	ed in your institution by 31.12. 2010 Related PB: Unrelated PB: Auto BM: Auto PB:				
● Are there any other HSC transplant institutions in your country? No					
●If yes, how many institutions are there?:					
 How many transplants have been performed. Related-BM:	ed in your country by 31.12. 2010 Related PB: Unrelated PB: Auto BM.: Auto PB:				

Worldwide Network for Blood and Marrow Transplantation



Workshop of the WBMT in cooperation with the WHO

●Is there a National Society for HSCT in your country? No						
• Are you a member of any of the following international societies?						
CIBMTR	EBMT EMBMTR RABMTR Others: ACTO					
 Are there any systems for unrelated HSCT in your country? Cord blood bank: No 						
Donor registry (Blood and Marrow Bank): No						
●Is there a recipient registry system in your country? No						
●Is there a donor outcome registry system? No						



Workshop of the WBMT in cooperation with the WHO

- Is there any national authority reporting requirement? Yes { DGHS)
- What are the major disease indications of HSCT?
 - 1. Acute Leukaemia, 2. CML
 - 3. Thalassaemia major, 4. Relapsed Lymphoma, Myeloma.
 - (Please list the main 4)
- •How are these recipients supported?
 - Mostly covered by insurance; not widely available
 - By private fund; rich people
 - Others; partly govt
- Do you know the outcome of the patients after HSCT in your institute or country (survival or mortality rate)?
- •If yes, what is the overall survival rate at 1 year(%)?
- •What is the biggest barrier to initiate or expand transplantation in your institute and/or country? i.Skilled manpower for BMT.,ii.Molecular Lab, iii.Upgrade B.Bank