

[Bangladesh]

Health Databases in an Information Society— Bangladesh Perspective*¹

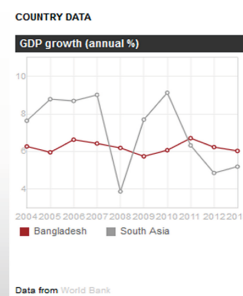
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Health Databases in an Information Technology Society Bangladesh Perspective



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- Bangladesh is a populous country of the world with a population size of 156.06 million in an area of 147,570 sq.km only
- The government is working hard to carry the country into the middle income group having at present annual per capita income of nearly 1200 US Dollars only



- The present government of Bangladesh seems to have understood the importance of information technology in boosting up the GDP growth
- As such has set up the independent **Ministry of Information Technology**

- The government has expanded its work in accordance with its pledge to digitize the country in true sense
- Now **3G telecommunication** system is in operation and **4G is coming soon**
- A huge web portal namely ***Bangladesh National Portal*** comprising of 25 thousand websites has been launched recently by the government to facilitate the activities of the government
- Ministry of Health has brought all relevant information about its employees of all categories under an electronic database system

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- We can find health databases in the field of
 - Vital statistics
 - Medical journals
 - Research publications
 - Human resources
 - Drugs
 - Improved healthcare waste management
 - Information about healthcare providers
 - Blood donors

- Directorate General of Health Services has prepared a database of 98 million rural people having their basic health records which will make the foundation of future lifetime shared health records
 - An initiative has also been taken to register and track the people specially pregnant women and under-5 children using 11 indicators as suggested by the Commission on Information and Accountability (COIA) of the United Nations
 - To develop an integrated health system Electronic Medical Records are kept in some hospitals as pilot project
- 11 COIA indicators for Maternal and Child Health**

 1. Maternal mortality ratio (deaths per 100,000 livebirths)
 2. Under-five child mortality, with the proportion of newborn deaths (deaths per 1,000 livebirths)
 3. Under-five children who are stunted (percentage of children below five years of age whose height-for-age is below minus two standard deviations from the median of the WHO Child Growth Standards)
 4. Met need for contraception (proportion of women aged 15-49 years, who are married or in union and who have met their need for family planning, i.e. who do not want any more children or want to wait at least two years before having a baby, and are using contraception)
 5. Antenatal care coverage (percentage of women aged 15-49 years, with a livebirth, who received antenatal care from a skilled healthcare provider at least four times during pregnancy)
 6. Antiretroviral prophylaxis among HIV-positive pregnant women to prevent vertical transmission of HIV and antiretroviral therapy for women who are treatment-eligible
 7. Skilled attendance at birth (percentage of livebirths attended by skilled health personnel)
 8. Postnatal care for mothers and babies (percentage of mothers and babies who received postnatal care visit within two days after childbirth)
 9. Exclusive breastfeeding for six months (percentage of infants aged 0-5 months) who are exclusively breastfed)
 10. Three doses of the combined diphtheria/pertussis/tetanus vaccine (percentage of infants aged 12-23 months, who received three doses of diphtheria/pertussis/tetanus vaccine)
 11. Antibiotic treatment for pneumonia (percentage of children aged 0-59 months) with suspected pneumonia receiving antibiotics)

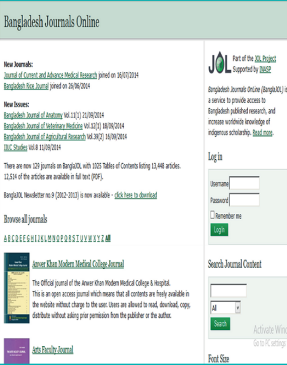
- An initiative for creating an archive of health databases has been taken by ICDDR,B, DGHS and Ministry of Science and Technology jointly
- Bangladesh Medical and Dental Council has introduced a database which includes registration numbers and other details of the doctors registered with it

- An Integrated National eHealth Enterprise Architecture (eHEA) is being developed to combine
 - Individual records of all citizens
 - Registries of organizations
 - Information on public health programs (DHIS 2.12)
 - Hospital information system (open MRS)
 - Health workforce registry (HRIS)
 - Inventory system for major equipments
 to virtually function as one system through a data exchange mechanism
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- All hospitals both public and private will be able to post the records of the patients to the national data warehouse through eHEA
 - The first usable version of this is expected to be ready for use within the next year
- Figure 17.2. Proposed design of the eHealth Enterprise Architecture which is being developed with technical assistance from WHO**



- An archival system has been developed in 2007 namely ***BanglaJOL***
- It is a project supported by the **International Network For The Availability of Scientific Publication(INASP)**
- It uses the **Open Journals System** created by the **Public Knowledge Project** based in Canada
- **Bangla JOL** includes **65 medical journals** accredited and published in Bangladesh



- Bangladesh is on the right track
- We will pursue the relevant authorities to speed up their work
- Meanwhile i would like to request our development partners and international community to support us wholeheartedly

