


# DATABASES ON PATIENTS' INFORMATION

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## DATABASES ON PATIENTS' INFORMATION



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## Patient Information

- General searchable databases
- Drug information searchable databases
- Medical dictionary databases
- Specific Medical specialty or category searchable databases

└─→ BIC, MGIMS, Sevagram Database

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## Patient Information Systems (PIS)

- Disease Diagnosis and Management are of vital importance for planning and evaluating Community Health Care
- By analyzing Morbidity, Mortality and Behavioral data, one can attempt to quantify health problems and the behavioral risk factors that contribute to them
- Hence PIS is important as it helps in correct recording, documenting and retrieval of patients information

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## Why Databases?

- Increase the effectiveness and productivity of health professionals / administrators
- Real - time information retrieval / analysis and export for research purposes
- Reduce the long - term cost of service
- Improve quality of service and patient satisfaction

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## Patients' Information Database

- A computerized database, in which data is coherently stored and put at the disposal of authorized users in a format adapted to the specific needs of the user

### Purpose of Database

Collect	Clinical Information →	Doctors
Store		Administrators
Process		Researchers
Retrieve		Policy makers
Communicate		

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## In - house developed Databases

- Need specific
- Extremely cost-effective
- Constant feedback based up gradation possible
- Customized / meets specific needs - diagnostics, research etc
- Archiving of medical information for future references
- Useful for resources planning in hospitals

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## Databases at BIC, Sevagram

TbDB	Tuberculosis
FilaDB	Filariasis
ObSoft	Obstetrics
Gynsoft	Gynaecology
PsySoft	Psychiatry
Sevamed	Bibliography with Abstract

Similarly other Conditions are being included

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## Bioinformatics Centre at JBTDRC, MGIMS, Sevagram

Established in 1999 with grant in aid from DBT, New Delhi

Thrust Clinical Informatics

- Publication of current awareness journal SEVAMED
- SEVAMED Quarterly issues for 2001 & 2003 with abstracts are available on CD
- CD on *Essentials of Biomedical Informatics & Communication* - based on the Proceedings of Workshops held during 2000-2003 at this centre
- In - house training to faculty and students
- National Workshops on Medical Informatics & Biomedical Communication
- ICMR - WHO Workshop on Storage and Retrieval of Information

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## Tuberculosis status

Global status

- 1.7 billion infected worldwide
- Each year 8 million new cases & 3 million deaths

India

- 12 -13 million suffering from TB, 2.5-3 million new cases are added annually & 5 lakhs deaths
- Almost one death per minute due to TB
- 15% amongst active TB cases represent extrapulmonary form

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## Problems in Diagnosis

- Conventional : Clinical, radiology, cytology bacteriology, histopathology etc
- AFB smear : Lacks sensitivity
- AFB culture : Time consuming (4-8 weeks). Restricted to open cases of TB
- Chest X-ray : Useful but can be non specific and insensitive
- Cytology, Histopathology : Invasive procedures
- PCR : Expensive, requires skilled personnel  
Not suitable for routine assay
- In children : Difficult in obtaining sputum specimens
- Mantoux test : Useful but not precise

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## Lymphatic filariasis

### Carriers

Global: 84 million  
India: 31 million

### Chronic cases

Global: 43 million  
India: 20 million

Ref: WHO 1997; NICD 1997

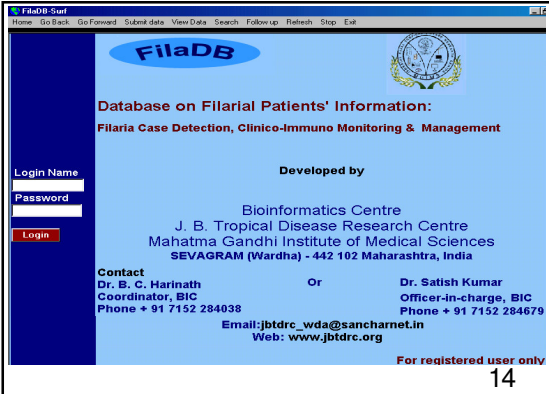
- A major cause of clinical morbidity
- A significant impediment to socioeconomic development

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## Problems in diagnosis of filariasis

- Night blood is examined for microfilaremia
- Low parasitemia, may not be detected
- Microfilariae are normally not seen in peripheral circulation in clinical and occult disease
- Diagnosis based on clinical features is empirical
- No classical manifestations in occult cases
- Therapeutic trial with DEC in clinically suspected cases may show transient clinical improvement but does not give radical cure
- Long term DEC treatment appears to have macrofilaricidal activity and thus relapse may be prevented
- There is a need for immunodiagnosis & monitoring of active infection in the absence of microfilaraemia

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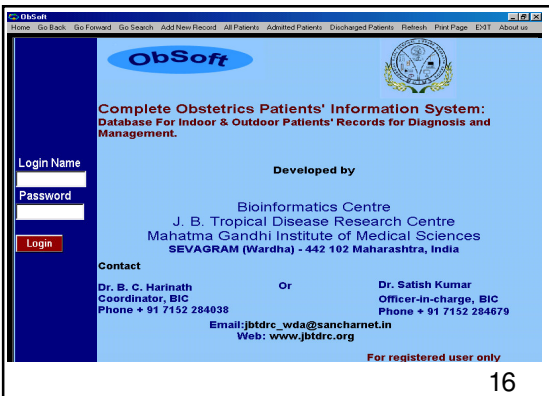
The screenshot shows the login page for FilaDB. The page title is "FilaDB" and the subtitle is "Database on Filarial Patients' Information: Filaria Case Detection, Clinico-Immuno Monitoring & Management". On the left side, there are input fields for "Login Name" and "Password", and a "Login" button. The right side of the page contains the following text: "Developed by Bioinformatics Centre, J. B. Tropical Disease Research Centre, Mahatma Gandhi Institute of Medical Sciences, SEVAGRAM (Wardha) - 442 102 Maharashtra, India". Below this, contact information is provided for Dr. B. C. Harinath (Coordinator, BIC) and Dr. Satish Kumar (Officer-in-charge, BIC), including their phone numbers and email address (jbtldr\_wda@sancharnet.in). The website URL is www.jbtldr.org. A note at the bottom right says "For registered user only".

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## Hospitals & Research Centres Evaluating Kits

- Institute of Vector Control and Zoonoses, Dept of Public Health and Preventive Medicine, Hosur
- NICD Regional Training and Research Centre, Calicut
- Regional Medical Research Centre (RMRC), Bhubaneswar
- Centre for Biotechnology, Chennai
- ISPAT General Hospital, Rourkela
- Advanced Patho Lab & Research Centre, Bilaspur
- Kasturba Medical College, Mangalore

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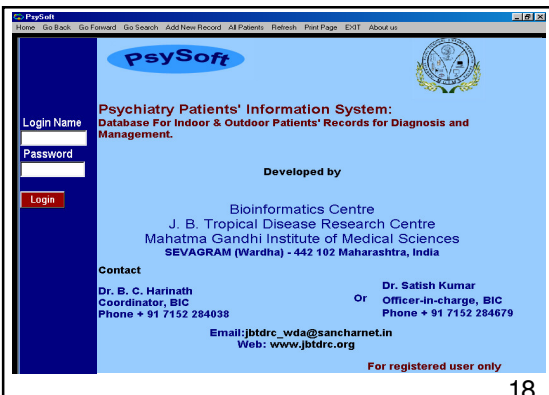
The screenshot shows the login page for ObSoft. The page title is "ObSoft" and the subtitle is "Complete Obstetrics Patients' Information System: Database For Indoor & Outdoor Patients' Records for Diagnosis and Management". On the left side, there are input fields for "Login Name" and "Password", and a "Login" button. The right side of the page contains the following text: "Developed by Bioinformatics Centre, J. B. Tropical Disease Research Centre, Mahatma Gandhi Institute of Medical Sciences, SEVAGRAM (Wardha) - 442 102 Maharashtra, India". Below this, contact information is provided for Dr. B. C. Harinath (Coordinator, BIC) and Dr. Satish Kumar (Officer-in-charge, BIC), including their phone numbers and email address (jbtldr\_wda@sancharnet.in). The website URL is www.jbtldr.org. A note at the bottom right says "For registered user only".

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The screenshot shows the login page for GynSoft. The page title is "GynSoft" and the subtitle is "Gynaecology Patients' Information System: Database For Indoor & Outdoor Patients' Records for Diagnosis and Management". On the left side, there are input fields for "Login Name" and "Password", and a "Login" button. The right side of the page contains the following text: "Developed by Bioinformatics Centre, J. B. Tropical Disease Research Centre, Mahatma Gandhi Institute of Medical Sciences, SEVAGRAM (Wardha) - 442 102 Maharashtra, India". Below this, contact information is provided for Dr. B. C. Harinath (Coordinator, BIC) and Dr. Satish Kumar (Officer-in-charge, BIC), including their phone numbers and email address (jbtldr\_wda@sancharnet.in). The website URL is www.jbtldr.org. A note at the bottom right says "For registered user only".

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The screenshot shows the login page for PsySoft. The page title is "PsySoft" and the subtitle is "Psychiatry Patients' Information System: Database For Indoor & Outdoor Patients' Records for Diagnosis and Management". On the left side, there are input fields for "Login Name" and "Password", and a "Login" button. The right side of the page contains the following text: "Developed by Bioinformatics Centre, J. B. Tropical Disease Research Centre, Mahatma Gandhi Institute of Medical Sciences, SEVAGRAM (Wardha) - 442 102 Maharashtra, India". Below this, contact information is provided for Dr. B. C. Harinath (Coordinator, BIC) and Dr. Satish Kumar (Officer-in-charge, BIC), including their phone numbers and email address (jbtldr\_wda@sancharnet.in). The website URL is www.jbtldr.org. A note at the bottom right says "For registered user only".

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