

A Web-Based Collaborative Database for Monitoring Fistula Patients: Clinical and Public Health Significance

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How to cite this article:

Rochat C-H, Merialdi M, Harris-Requejo JA, Kulier R, Koppenhoefer S, Campana A. A Web-Based Collaborative Database for Monitoring Fistula Patients: Clinical and Public Health Significance. *Geneva Foundation for Medical Education and Research*. 19 March. 2007.

Available from:

http://www.gfmer.ch/Presentations_En/Pdf/Fistula_database_Rochat_2007.pdf

Background Information

The Geneva Foundation for Medical Education and Research (GFMER) is a non-profit organisation established in 2002. It is supported by the Department of Health of the Canton of Geneva, the Faculty of Medicine, Geneva University, and the Geneva Medical Association, and works in close collaboration with the World Health Organization (WHO). GFMER is a WHO Collaborating Centre in Education and Research in Human Reproduction. The overall objectives of the Foundation are to establish productive collaborations between entities from the public and private sectors, and to develop feasible health education and research programmes that can be implemented by developing countries and countries in economic transition.

Since its creation in 2002, GFMER has been involved in the field of obstetric fistula. The Foundation's efforts towards improving the lives of women suffering from this condition include the programmatic activities of Professor C-H Rochat who has been running surgical teaching missions since 1996 in Tanguieta Hospital, Northern Benin.

During the last few years, Dr. Rochat's program has expanded to include the training of doctors in neighboring francophone African countries. In total, 20 teaching missions have been conducted, 10 doctors have been trained in the surgical repair of obstetric fistulas, and more than 400 operations have been performed.

GFMER, in partnership with the Hospital Saint Jean de Dieu of Tanguieta and the Faculty of Health Sciences of Cotonou (Benin), has also developed a concept termed "The model of Tanguieta" which outlines a comprehensive strategy for training health care providers in the treatment and prevention of obstetric fistula. This health-service based model has been exported to centers in Guinea (Conakry), Burkina Faso and

Cameroon. However, the preventive prong of the program has not yet been implemented in these countries.

A New Web-Based Data Entry System: The GFMER Database

Because of the critical need for a systematic method of collecting information about obstetric fistula, GFMER produced a web-based data entry system (GFMER database) that enables the collection and evaluation of prospective data related to the demographic and other descriptive characteristics of fistula patients, the various surgical and other clinical procedures used for fistula repair, and women's experiences re-integrating into society post-surgery. This database is aimed at improving our understanding of the pre- and post-operative profile of fistula patients so that more appropriate and effective preventive measures can be designed, and so that surgical techniques and outcomes can be objectively assessed. A second aim of this data-entry system is to facilitate the development of a standardized fistula classification system which will make possible comparative research across surgical centres, and the identification of cases requiring the specialized care of an expert fistula surgeon. The areas currently covered by the database are: details about the circumstances leading up to the occurrence of the fistula, the socioeconomic and pre-operative health status of the fistula patient, the surgical and other medical treatment received, the post-operative health status of the patient, and follow-up.

Importantly, the GFMER database allows for the administration and management of data from multiple centres. Collected data can be easily accessed by using the database search capabilities. For ease of use, statistical analyses are presented in text and chart form, and all statistics are updated in real-time and accurately reflect the latest data inputted into the system.

The database itself is secure in terms of user access, authentication level, auditing / logging of processes and actions, and preservation of anonymity where required. Authorized users are able to see and export data in a format that is readable by statistical analysis software. The running and maintenance of the database is coordinated by GFMER in collaboration with international experts in the field.

In order to most contribute to the eradication of obstetric fistula, the GFMER is providing access to and use of this database free of charge. Currently, the GFMER database is under its final evaluation from the *International Obstetric Fistula Working Group (Data, Indicators and Research Group)* to become an internationally recognized tool for prospective studies.

Database Applications:

The targeted users of this database are public health policy makers, social workers, fistula surgeons, and other health care professionals working in the field of obstetrics and perinatal care.

The GFMER database will also be used as the data collection and management system for a study in collaboration with the WHO Department of Reproductive Health and Research that will address three critical areas of research concerning obstetric fistula: A. Prevention of the problem (including analysis of underlying socio-cultural

and economic factors leading to the problem, and medical interventions such as caesarean sections and effective labour management techniques). B. Treatment (review and assessment of current surgical and other medical procedures used in the treatment of simple and complex obstetric fistula cases). C. Re-integration (evaluation of existing re-integration strategies post-surgery taking into account demographic and other socio-cultural factors potentially influencing the course of recovery and a woman's ability to re-integrate into her community).

References

- [Obstetric fistula - Charles-Henry Rochat :
http://www.gfmer.ch/Presentations_Fr/Fistules_obstetricales.htm](http://www.gfmer.ch/Presentations_Fr/Fistules_obstetricales.htm)