GENEVA FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH



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Preface by the director

The Geneva Foundation for Medical Education and Research (GFMER) is a non-profit organization established in 2002. It is supported by the Department of Social Affairs of the City of Geneva and other Swiss and international institutions and works in close collaboration with the World Health Organization (WHO).

In 2019 the foundation and its partners launched for the tenth consecutive year, a series of distance training/online courses on sexual and reproductive health research: a total of 134 health professionals from 45 countries attended the training programme.

GFMER continues its active partnership with the UNFPA/WHO 'Campaign to end fistula'. The aim has been to create a 'Centre of Excellence for the prevention and treatment of obstetric fistula' in Northern Benin, which would serve other countries in the region under the name of "Tanguieta Model". During 2019, several missions were conducted in Benin, where Professor Charles-Henry Rochat (who has the overall responsibility for GFMER's fistula project) and his team of specialists, operated on a total of 288 obstetric fistula cases in different countries. Moreover, local doctors were trained on the management of obstetric fistula.

In 2019, the Geneva Foundation for Medical Education and Research (GFMER) in collaboration with the Oxford Maternal and Perinatal Health Institute (OMPHI) translated the computer-based training module on Assessing Maternal Anthropometry and Weight Gain During Pregnancy into Spanish, Portuguese and Italian version.

Unfortunately, in this year, Dr Heli Bathija, one of GFMER executive committee members passed away on 26 September 2019.

GFMER has built a strong partnership with governmental and non-governmental organizations and universities for the exchange of information and expertise at international level. The website of the foundation had 2395097 page views and visitors from all over the world.

We believe our efforts to assist in many countries and the programmes we deliver contribute to improving the reproductive and sexual health status of the populations in need.

Finally, I would like to thank the City of Geneva, the World Health Organization (WHO) and other institutions, for their financial and technical support, which have ensured the successful implementation of our projects and programmes.

Prof. Aldo Campana

Aldo

The Director

Mission

The overall objectives of the Foundation are to promote and develop health education and research programs.

GFMER has a mandate to address challenges, such as:

- The organization of training programmes in Geneva, covering research methodology, epidemiology, reproductive and sexual health, and other medical areas.
- The dissemination of the Geneva training courses in other countries.
- The initiation and provision of support for researchers to plan, conduct and publish their scientific work.
- The dissemination of medical information on Internet.
- The dissemination of clinical guidelines for use in clinical training programmes.
- The collaboration with the UNFPA/WHO programme to end obstetric fistula.

Foundation Council

- Prof. José Villar (President)
- Dr. Blaise Bourrit (Secretary)
- Alain Gris (Treasurer)
- Prof. Giuseppe Benagiano
- Prof. Ana Maria Langer Glas

Executive Committee

- Prof. Aldo Campana (Director)
- Prof. Charles-Henry Rochat (Co-director)
- Dr. Karim Abawi
- Dr. Heli Bathija (Died 26 September 2019)
- Dr. Hongguang Dong
- PD Dr. Pierre Vassilakos

GFMER mourns Dr Heli Bathija



22 June 1952 - 26 September 2019

On 26 September 2019, GFMER sadly lost one of its executive committee members, <u>Dr Heli Bathija</u>. Heli was born in Finland on 22 June 1952. She completed her medical degree at the University of Turku Finland and thereafter obtained a Diploma of Tropical Medicine and Hygiene from the School of Tropical Medicine, University of Liverpool. She was a staff of the WHO Department of Reproductive Health and Research from 1985 until her retirement in 2012. Following her retirement, she became the Director of GFMER Knowledge Management and Sharing. Heli started the <u>GFMER initiative on "mHealth for Sexual and Reproductive Health"</u>. She subsequently developed the <u>Online training course Mobile Phones for Sexual and Reproductive Health "MHealth4SRH"</u> in 2013. She created an awareness on <u>Environment and Reproductive Health (ERH)</u> and was instrumental to the collaboration with the Alexandria University towards a proposal to develop an online training course on <u>Impact of Environmental Pollutants on Reproductive Health</u>. Heli is very much loved and will be greatly missed.

GFMER main fields of activities

1. Training course in sexual and reproductive health research 2019

https://www.gfmer.ch/SRH-Course-2019/index.htm

Since 2003 GFMER, in partnership with the WHO and other partner institutions, has organized a training course on sexual and reproductive health research. The course focuses on research methodology and attracts the participation of health professionals from different countries, particularly from developing countries. Through the pool of participants, GFMER has managed to disseminate the course in different countries.

In order to reach more health professionals, in 2010 GFMER in collaboration with WHO and other partners launched the online course on sexual and reproductive health research "From Research to Practice: Training Course in Sexual and Reproductive Health Research" that offers a training package specially developed for those health professionals involved in research, whose access to learning is limited by time, financial resources or other constraints and for whom access to quality education and learning is limited. The programme is designed to meet a wide range of contemporary issues in sexual and reproductive health, especially in developing countries. It helps students to better identify the problems related to reproductive and sexual health, it helps to improve the skills of caregivers, and it promotes good practices.

In 2019, GFMER successfully implemented the tenth edition of its online training course, bringing to bear the experience gained from the previous editions.

This course is part of the WHO policy for increasing human resources in the field of sexual and reproductive health, particularly in developing countries. GFMER is mandated to organize the course. In order to better tailor the course to specific needs of our participants, in 2019, it was offered as 2 separate courses each lasting for 8 weeks. They were:

- Adolescent sexual and reproductive health
- Research methodology and research protocol development

Objectives

The objectives of the courses were as follows:

- 1. Provide appropriate training adapted to the needs of health professionals in different countries, notably developing countries.
- 2. Help reduce morbidity and mortality in women of reproductive age and newborns through the development of human resources capacity.
- 3. Contribute to a better sharing of expertise between health professionals and local and international institutions, especially in developing countries.
- 4. Organize a continuing learning project in the field of sexual and reproductive health intended for developing countries and economies in transition.
- 5. Provide training and quality learning for health professionals.
- 6. Create a network between health professionals from different backgrounds, institutions, and research, for the exchange of knowledge and information.
- 7. Engage students in research work in an area related to health programmes in their home country.

Course participants

The majority of students in our courses were healthcare providers from developing countries involved in the area of reproductive and sexual health and whose access to healthcare training is limited by time and/or financial resources. The courses were not only offered to doctors, but also to midwives, nurses, health educators, social workers, and reproductive and sexual health programme managers. Most of the participants were in the age group from 30 to 49 years of age. The care providers in this age group have professional or familial obligations and, for them, our courses are likely to have the most impact. Thanks to the flexibility of the courses, which offers a good opportunity to access continuing training in the field of care. Women were well-represented as they made up approximately half of the participants in each course.

Adolescent sexual and reproductive health

https://www.gfmer.ch/SRH-Course-2019/adolescent-health/Adolescent-health-participants.htm

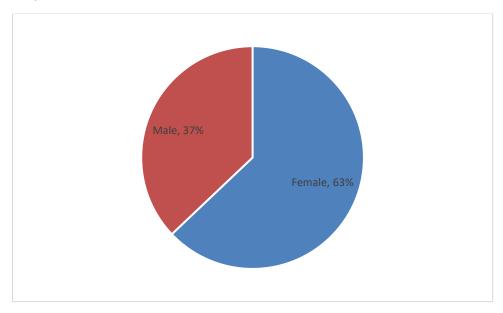
A total of 89 health professionals from 43 countries were registered in the online training course in adolescent sexual and reproductive health in 2019.

Table 1: Age of participants

Age Group	Number	%
20-29	16	18%
30-39	39	44%
40-49	27	30%
50-59	7	8%
Total	89	100%

The majority of participants (44%) were in the age group 30 to 49 years.

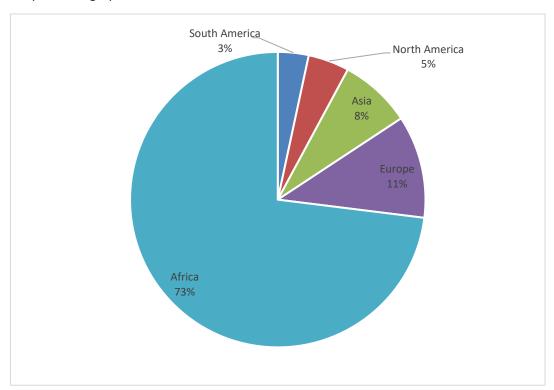
Graph 1: Gender of students



As indicated by the graph above, women made up 63% of participants.

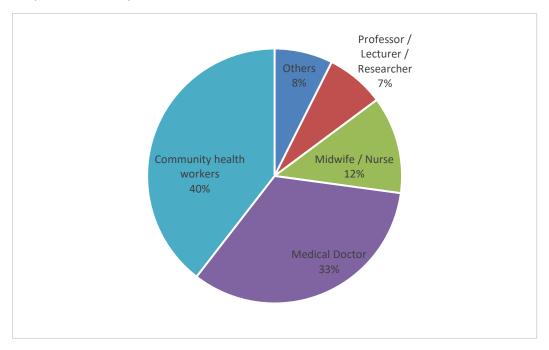
This course addressed mainly healthcare professionals in developing countries with the following distribution: Africa (73%), Asia (8%), Europe (11%), North America (5%) and South America (3%).

Graph 2: Geographic distribution of students



The following graph shows the proportions between the different professions.

Graph 3: Students' professions



Research methodology and research protocol development

https://www.gfmer.ch/SRH-Course-2019/research-methodology/Research-methodology-participants.htm

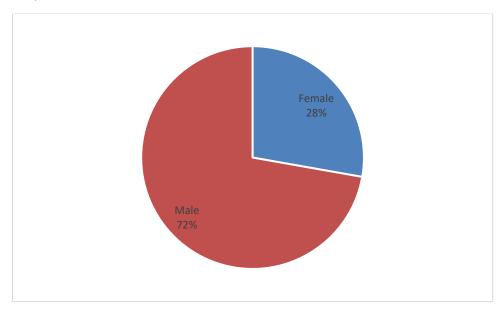
A total of 54 health professionals from 20 countries were registered in the online training course in Research methodology and research protocol develop in 2019.

Table 1: Age of participants

Age Group	Number	%
20-29	7	13%
30-39	24	44%
40-49	20	37%
50-59	3	6%
Total	54	100%

The majority of participants (81%) were in the age group 30 to 49 years.

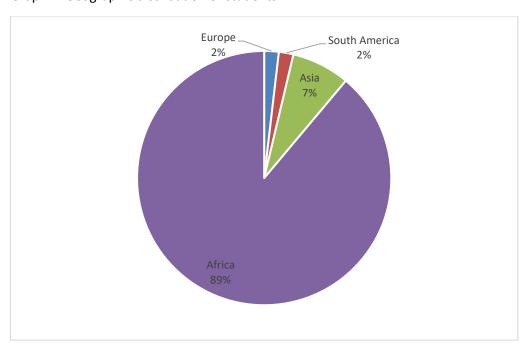
Graph 1: Gender of students



As shown in the graph above, 28% of participants were women.

The healthcare professionals who took the course were mainly from developing countries as follows: Africa (89%), Asia (7%), Europe (2%) and South America (2%).

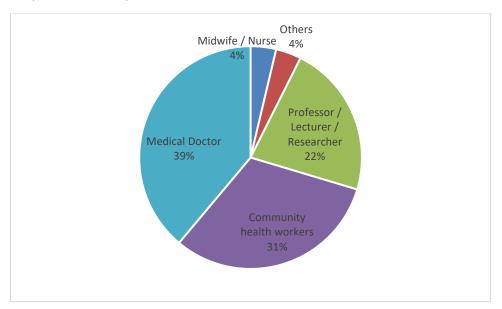
Graph 2: Geographic distribution of students



The course was offered to medical doctors, midwives, nurses, community health workers, teachers and researchers.

The following graph shows the proportions between these professions.

Graph 3: Students' professions



Recruitment of students

The students became aware of the course through the following means:

- Publicity for the course and local contact coordinators in the countries and regions.
- Publicity for the course on the GFMER website and partner sites.
- Mobilization of the GFMER and WHO networks. These include local and international NGOs,
 WHO collaborating centres at the country level, health ministries, and universities.

Selection of students

This course is a post-graduate/continued learning course for health professionals with a diploma involved in the field of sexual and reproductive health. The criteria for selection are as follows:

- A degree in a relevant discipline of health sciences, natural sciences, or social and economic sciences.
- Involved in the domain of sexual and reproductive health.
- Preference is given to healthcare providers who work for health establishments at the district level, an NGO, or a ministry of health.
- The foundation favours the participation of woman.

It is noted that the foundation has established partnerships with NGOs, health ministries, and universities in different countries. Certain entities include this course in their human resource development programmes. Moreover, each year, a number of participants find the information on their own when consulting the foundation site or on partner sites.

The application must contain the following elements:

- A CV.
- A certified copy of the diploma in medicine and any additional diplomas.
- A letter of motivation indicating clearly their interests and goals for the course.

Based on the application form and documents provided by the candidates, we make our preselection. We communicate the list of candidates to the country coordinators who we ask to contact the candidates by phone, email, or skype. When possible, we try — via our coordinators - to meet on site. For countries where we do not have local coordinators, we ask other coordinators in nearby regions to assume contact. For example, for South Sudan, we call our coordinator in Sudan. If necessary our Geneva team contacts the candidates or their employers.

Course contents

The content of this course is based on recommendations by WHO, so that other global institutions can recognize it. It is also enhanced by field experience from our teachers with a wide range of experience in the field of sexual and reproductive health. It is based on groundwork, especially in developing countries, and proposes pragmatic solutions. We provide reference materials for our students and encourage them to use it in their professional practice (prevention, treatment, training).

There are two modules offered as separate courses:

Adolescent sexual and reproductive health

https://www.gfmer.ch/SRH-Course-2019/adolescent-health/index.htm

Research methodology and research protocol development

https://www.gfmer.ch/SRH-Course-2019/research-methodology/index.htm

Each course is run by a module coordinator. The coordinator decides the content and schedule of the module and designates its contributors. The module coordinators are experts or scientists from WHO and/or various universities who possess important professional networks at the international level.

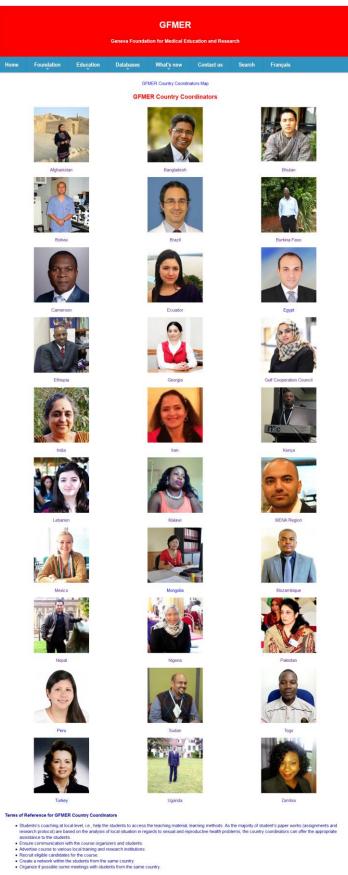
Teachers, partner institutions

The speakers, lecturers, and course facilitators are highly trained professionals from WHO, universities, and specialized institutions. They have a wide range of knowledge and experience in the field of sexual and reproductive health, especially in developing countries.

In 2019, a total of 11 teachers from WHO, GFMER as well as other national and international institutions were involved in teaching and tutorship for the online training course.

Course coordinators at country level

 $\underline{https://www.gfmer.ch/country-coordinators/GFMER-country-coordinators.htm}$



GFMER has appointed a total of 30 coordinators in Afghanistan, Bangladesh, Bhutan, Bolivia, Brazil, Burkina Faso, Cameroon, Ecuador, Egypt, Ethiopia, Georgia, Gulf Cooperation Council, India, Iran, Kenya, Lebanon, Malawi, MENA Region, Mexico, Mongolia, Mozambique, Nepal, Nigeria, Pakistan, Peru, Sudan, Togo, Turkey, Uganda, and Zambia.

The main tasks of country coordinators consist of:

- Student coaching at local level, i.e., helping the students to access the teaching material and learning methods. As the majority of student's work (assignments and research protocol) is based on the analysis of local situations in regard to sexual and reproductive health problems, the local coordinators can offer the appropriate assistance to the students.
- Ensure communication with the course organizers and students.
- Advertise the course to various local training and research institutions.
- Recruit eligible candidates for the course.
- Create a network between students from the same country.
- Organize if possible some meetings with students from the same country.
- Identify potential sponsors to provide scholarships for students. It is worth mentioning that the
 majority of institutions allocate funds for their human resource capacity building programmes.
 This online course is advantageous for health professionals especially those from developing
 countries, where access to a quality education is limited by time, financial resources or both.

Teaching methods

https://www.gfmer.ch/SRH-Course-2019/pdf/Course-guide-2019.pdf

Teaching methods consist of on-line lectures (recorded, didactic presentations), key readings, reading materials, additional references and referrals to related websites. Compared to other courses, the Training Course in Sexual and Reproductive Health Research is extremely rich in terms of documentation and published teaching resources.

For each of the courses, participants receive assignments. At the end of the course, they may respond to a series of multiple-choice questions. For their assignments, the students receive very precise instructions. We have created a module for assignments. Before writing the assignment, the student is asked to follow the course, read the reference documents that we put at their disposal, and write their text according to the given instruction. We have also created an evaluation grid of personal work. Tutors and coordinators revise the assignments. The goal is to help students deal with problems of sexual and reproductive health in their respective countries, using what they learn in our courses and preparing their work with respect to academic and scientific standards.

In terms of documentation and published educational resources, our courses are among the richest in the world. They contain the most reference documents (guidelines), continuously updated in the field of sexual and reproductive health. These help participants to become more familiar with scientific reading and writing and use the knowledge acquired in the training course in their day-to-day professional practice. A personal coach is assigned to each participant. Coaches are GFMER country coordinators and former participants, who facilitate the learning process with the participants. As the majority of students' work (assignments and research protocol) is based on the analysis of local situations in regard to sexual and reproductive health problems, the assistance of country coordinators is very important.

The participation of a student is measured by the submission of assignments in the time given and their response to the multiple-choice questions. Once their work is completed, reviewed, and

accepted for a given module, the student is credited with a number of hours (6 to 8 hours per week), regardless of the actual time it took to complete the work.

To support the participants, different mechanisms of communication and interaction (Facebook, Google Group, Skype, Twitter) are used. These tools favour interaction between participants and teachers and, allow for the creation of a rich network of exchange between health professionals. The diversity within the community of students and the establishment of communication tools has furnished an excellent means of learning and of sharing experiences between students from different countries.

GFMER provides free access to the course contents, which are an important source of information for professionals who are involved in the domain of sexual and reproductive health (only registered students benefit from a regular monitoring and obtaining a certificate).

GFMER has created an online community for the training course in order to improve communication with and between participants and provide access to academic and administrative support. The diversity among participants and the network facilitated by GFMER provide an opportunity to learn from and share experiences with peers from around the world.

Final evaluation

At the end of each course, participants of the Training Courses in Sexual and Reproductive Health Research receive a certificate if they meet the following conditions:

- Participants are required to submit multiple-choice questions of the course module (Research methodology and research protocol development).
- Participants are required to have completed the assignments of each course module.
- Participants must develop a research protocol relevant to their practice, under the guidance of a tutor in the domain of sexual and reproductive health (Research methodology and research protocol development).

Throughout each training course, participants are supervised by country coordinators, coordinators of the modules, teachers and tutors.

Following students after the course

Each participant of our courses becomes a member of our Foundation and continues contact with them. Monitoring and maintaining contact with them and between them prove to be very useful. Today GFMER has available an international network of healthcare providers on the ground in direct contact with their community. It is thanks to this network that we have established collaborations with Harvard University and Oxford, and the Service of Gynaecology at the University Hospital of Geneva. These institutions collaborate with GFMER to develop training tools for healthcare providers at the community level. The network that the foundation runs facilitates the dissemination of these tools. This allows us also to establish contacts with NGOs, ministries of health or other institutions in a number of countries.

Picture of the week

https://www.gfmer.ch/gfmervoices/index.htm

We have created a section on our website entitled "Picture of the week". Each week, we publish the photo of a student showing their professional activities in a treatment facility, in a refugee camp, on

site, in class, etc. This initiative has proved to be very gratifying for our students. It emphasizes the importance of distance training for health professionals where access to training is sometimes limited. It also shows the application of knowledge acquired by our students in their professional practice.





2. Sexual and reproductive rights

https://www.gfmer.ch/srr/index.htm

In order to achieve sexual and reproductive health, people need to know their sexual and reproductive rights. The Geneva Foundation for Medical Education and Research (GFMER) therefore sees a close relationship between sexual and reproductive health on the one hand and the legal and political system on the other. For these reasons, the Foundation created a dedicated website on Sexual and Reproductive Rights. Since its establishment in 2002, GFMER has exchanged sexual and reproductive health expertise with governmental and non-governmental organizations all over the world. GFMER has become a resource centre for training and research in human sexuality and reproduction, creating a vast network of health professionals in developing and developed countries.

With this website GFMER seeks to contribute to a meaningful inclusion of human rights in sexual and reproductive health issues.

Content of the sexual and reproductive rights website:

- Introductions to major sexual and reproductive rights topics.
- Regularly updated summaries of national legislations for the major areas of sexual and reproductive health.
- Selected publications on legislation and ethical issues in sexual and reproductive health.

3. Clinical training, prevention and treatment of obstetric fistula

http://www.gfmer.ch/fistula/index.htm



Today, at least two million women needlessly suffer from untreated fistula.

Since 1993, Dr Charles Henry Rochat together with a group of specialists and local medical doctors, delivered fistula repair surgery to more than 3600 women.

GFMER is a partner in the UNFPA/WHO campaign to end fistula. The aim of GFMER participation in this campaign is to create a "Centre of Excellence for the prevention and treatment of obstetric fistula" in Tanguieta (Northern Benin), which would serve as a model to other countries in the region.

In addition to the care of patients from Benin, Togo, Burkina Faso, Guinea Conakry, Cameroon, and Madagascar, the program aims to train local and international staff. A «prevention» and «reintegration» component was also implemented with local NGOs.

Objectives

- Reconstructive surgery, with mainly treatment of obstetric fistulas and complex urological cases
- Medical training and research
- Improving healthcare system, preventative care and reintegration of patients.
- Raising awareness among political leaders at the regional level

Activities and achievements in 2019

- During 2019, we focused on ways to bring about good reconstructive surgery for fistula patients in West and Central Africa, especially in Tanguiéta but also in Madagascar where 2,000 Malagasy women develop fistula each year (Source: UNFPA).
- Thanks to the support of Carigest, we awarded 17 scholarships to doctors and physicians from Benin, Togo and Madagascar.
- We organised 5 surgical missions in order to treat patients and train African local doctors in fistula surgery missions in several African countries to operate on fistula cases.
- A total of 288 obstetric fistula cases were operated.
 - o Cameroon (February), 22 cases
 - o Benin (April) 58, cases
 - Benin (August) 30 cases
 - Benin (November) 41 cases
 - o Burkina Faso (January- December) 117 cases
 - Madagascar 20 cases
- We carried out research and analysis, invested in long-term change initiatives and enabled collaboration through our networks.
 - Dr Rochat and his team (composed of specialists from Switzerland, France, USA, Cameroun and Burkina Faso) disseminated information and research to different kind of public organising conferences and workshops on diagnosis, treatment and follow-up of fistula cases.
 - We advocated for a multidisciplinary approach for care of women suffering from obstetric fistula.
- We have published 3 scientific articles:
 - BENSKI, Anne-Caroline, DELAVY, Martine, ROCHAT, Charles-Henry, et al. Prognostic factors and long-term outcomes of obstetric fistula care using the Tanguiéta model. International Journal of Gynecology & Obstetrics, 2019.
 - 2. Tebeu Pierre Marie, Ekono Michel, Ndoua Claude Cyrille Noa, Ngassa Meutchi Georges Didier, Nkene Mawam- ba Yvette, Rochat Charles- Henry. Surgical outcome of genito-urinary obstetric fistulas (GUOF) with or without bladder neck involvement: an experience from the University Teaching Hospital, Yaoundé, Cameroon. Obstet Gynecol Int J, 2019, vol. 10, no 3, p. 223-228.
 - 3. Tebeu Pierre Marie, Ngameni Herve, Nebardoum Derguedbé, Tseunwo T Claudine T, Fetse Tama T. Gérard, Rochat Charles-Henry, Connaissances, Attitudes et Pratiques des Professionnels de Santé des Districts de Santé du Koung-Khi et De la Mifi à l'Ouest-Cameroun Vis-À-Vis des Fistules Obstétricales. HEALTH SCIENCES AND DISEASES, 2019, vol. 20, no 2.

Supporting institutions for obstetric fistula project

The GFMER obstetric fistula programme is supported by the City of Geneva, the communes of Chêne-Bougeries and Chêne-Bourg, Amber Foundation, Rumsey & Cartier Foundation, Global Foundation for Life Sciences, Pictet Group Charitable Foundation, Pharos Trust, Firmenich family philanthropic foundation, Baur Foundation, Gabriel Tamman Foundation, Swiss Philanthropy Foundation, Carigest (training scholarships) and private donors.

Ongoing activities for obstetric fistula project

- Collaboration with the Fondation Claudine Talon (first lady of Benin).
- Collaboration with Women and Health Alliance International WAHA.
- Collaboration with Synergies africaines in Cameroon, Congo, Central Africa, and Chad.
- Dissemination of the "Tanguieta model".
- Dissemination of the fistula database and fistula group website.
- Organization of local events to provide the training module on fistula to health professionals.
- Ciespac and Oceac partnership.
- Contribution to the awareness and prevention of "obstetric fistula".
- Participation in the hospitalization costs of the patients.
- Contribution to travel expenses of the African and expatriated teams on the various sites.
- Contribution to purchase of equipment for surgical missions.
- Contribution to Scholarships for the specialization of doctors and physicians from Benin, Togo, and Madagascar.
- Financing the continuity of the programme Guinea-Conakry, Burkina Faso, Cameroon and Benin.
- Supervision theses and publication.

4. E-learning public health course on emergency surgical care

https://www.gfmer.ch/surgery/index.htm

GFMER in collaboration with other partners developed a public health e-learning course on emergency surgical care. The course was launched in July 2019. Dr Meena Nathan Cherian, the director of GFMER Emergency and Surgical Care oversees this project.

GFMER Emergency & Surgical Care Program

• The GFMER created an Emergency and Surgical Care (ESC) program to highlight the importance of five billion people lack access to basic life-saving surgical care and yet it is not considered as a priority in the field of public health globally. Timely access to life-saving and disability-preventing emergency and surgical care services are crucial in the entire life-course from birth to old age (in pregnancy-related complications, trauma, congenital anomalies, cancer, abdominal conditions, disasters). Countries are underway to develop their national policies and plans on their health priorities in order to meet the Sustainable Development Goals (SDGs) towards Universal Health Coverage (UHC). With the passing of the first World Health Assembly Resolution on 'Strengthening of emergency and essential surgical care and anesthesia services in the context of UHC', it made evident that this is the most strategic time to share evidence-based knowledge with people interested in population health on its essential role in maternal and child health, non-communicable and communicable diseases and humanitarian crises. However, there is a lack of training tools specifically to make informed policy decisions for the integration of safe surgical

(including obstetrics, trauma, anesthesia) care services into their community, district or national health plans towards meeting the SDGs. (https://www.gfmer.ch/surgery/index.htm)

- GFMER ESC program conducted a worldwide anonymous public health awareness survey to understand the gap in surgical care knowledge.
- GFMER developed an online public health training course on "Emergency & Surgical Care in Universal Health Coverage" which aimed to engage people interested to
 - (i) apply evidence-based knowledge for influencing decision-making in policies or
 - (ii) advocate as a public health issue on a global platform.

The online public health course was developed with experts and over 100 reviewers from published resources of the WHO, Lancet Global Surgery, Disease Control Priorities (3rd edition), International Committee of the Red Cross and Médecins Sans Frontières, with the following learning objectives to: (i) understand the implications of the unmet needs for timely access to safe and quality surgical care services within health systems, (ii) identify public health solutions to surgical care crisis at all levels of healthcare, including humanitarian crises, and (iii) understand ways to strengthen surgical care systems towards achieving UHC.

- Emergency & Surgical Care in UHC public health training course, was launched in July 2019. The online course takes approximately four hours to complete with four modules that cover various parameters to surgical care such as in humanitarian crises and imbedding its quality and safety and its central role in UHC. The course is free, however, participants can upgrade at any time for a fee of 97 USD to benefit access to the Global Discussion Forum for relevant topics with peers, certificate signed by GFMER and global experts, continuing professional development (CPD) credits of 4.0 approved by the Royal College of Surgeons in Ireland upon scoring 70% in the MCQ test as well as completing a short assignment on how the knowledge/skills gained will be applicable in the participant's current or future projects, in their country or other Low- and Middle- Income Countries. (pictures in GFMER Photo Gallery)
- Updates on the ESC course: to date 1073 participants of diverse disciplines from over 40 countries
 have registered. The online free course features a short quiz before and after the course for
 participant's self-evaluation and learning progress. The outcome of this course has thus far been
 successful based on the response received from participants who have asked for additional
 information on surgical care.
- Potential to develop similar high-quality courses on public health topics relevant to contemporary public health issues is a possibility seeing the interest in the current online public health ESC course.
- GFMER's ESC program presented in global and national conferences, meetings and education programs. (https://www.gfmer.ch/surgery/gallery.htm)
 - Global Anaesthesia Event Royal College of Anesthesiologists, UK. 2019
 - Biennial Conference of Anesthesia and Critical Care, Myanmar. 2019
 - Medical Humanitarian Mission Paraguay, The Paraguayan Section of the International College of Surgeons. Paraguay 2019
 - Conference of the International Society of Geriatric Oncology, Switzerland. 2019
 - Afro-European Medical and Research Network Conference UN Palais Geneva, Switzerland.
 2019
 - International Committee of the Red Cross 33rd War Surgery Seminar Geneva, Switzerland.
 - Congress of the European Federation of the International College of Surgeon (ICS) with 3rd conference of Polish section of ICS, Poland. 2018

- Humanitarian Surgery Ambon with ICS, Indonesia. 2018
- SurgiBox Meeting, EPFL, Lausanne, Switzerland. 2018
- Afro-European Medical and Research Network Conference UN Palais Geneva, Switzerland.
 2018

5. Institutional partnerships

GFMER collaborative activities with Oxford Maternal and Perinatal Health Institute and Harvard Maternal Health Taskforce

https://www.gfmer.ch/omphi/index.htm

The evidence-based management of Pre-eclampsia and Eclampsia

https://www.gfmer.ch/SRH-Course-2010/pre-eclampsia-University-of-Oxford/index.htm

OMPHI and GFMER developed the first online training course on the evidence-based management of Pre-eclampsia and Eclampsia in 2010. The update of the course is currently ongoing.

The dissemination of this module continued during 2019 and, since its launch to April 2019, a total of 3766 health professionals from 120 countries have successfully completed the training and knowledge assessment and been awarded certificates.

The evidence-based management of postpartum haemorrhage

https://www.gfmer.ch/omphi/pph/index.htm

After the success of the evidence-based pre-eclampsia and eclampsia training course, OMPHI and GFMER also developed another online training course on the evidence-based management of postpartum haemorrhage (PPH) in 2012.

The dissemination of this module continued during 2019 and, since its launch on June 2013 to April 2019, a total of 4045 health professionals from 128 countries have successfully completed the training and knowledge assessment and been awarded certificates.

Maternal infections

https://www.gfmer.ch/omphi/maternal-infections/index.htm

Following the success in disseminating evidence-based knowledge and the high demand for similar courses, in 2014 GFMER in partnership with the Maternal Health Taskforce of the Harvard School of Public Health, the Oxford Maternal and Perinatal Health and the Global Health Network developed a third e-learning module on Maternal infections, that is one of the six major causes of maternal death worldwide.

The dissemination of the module continued during 2019. Since the launch of the module in June 2015 to April 2019, a total of 1065 health professionals from 92 countries took this module and completed the knowledge assessment.

Obstetric fistula

https://www.gfmer.ch/fistula/Obstetric-fistula-2015.htm

A fourth training module was developed on obstetric fistula. Its dissemination continued in the current year. Since its launch in July 2015 to April 2019, the fistula module has been disseminated to a total of 1058 health professionals from 98 countries have completed the knowledge assessment.

A French version is also available (https://www.gfmer.ch/fistule/Fistules-obstetricales-2017.htm).

It is worth mentioning that the above-mentioned modules can also be accessed by Smartphone and tablet. Moreover, a PDF version is also made available for each module to allow their offline use.

INTERGROWTH-21st

https://www.gfmer.ch/omphi/intergrowth-course/index.htm

The International Fetal and Newborn Growth Consortium for the 21st Century is a global multidisciplinary network of more than 300 researchers and clinicians from 27 institutions in 18 countries worldwide. They are dedicated to improving perinatal health globally and committed to reducing the millions of preventable newborn deaths that occur as a result of preterm birth or poor intrauterine growth.

In order to meet this goal, there is need for the international growth standards to measure and improve maternal and newborn clinical care and compare outcomes across populations. Such standards exist to monitor the growth of infants and children. These are the WHO Child Growth Standards and their release in 2006 was a landmark achievement. These scientifically based standards are now used worldwide.

However, the fetal and newborn counterpart has been missing, which led the Consortium to implement the INTERGROWTH-21st Project. Their aim was to extend the WHO Child Growth Standards into the fetal and neonatal period, providing tools for continuity of care from conception to 5 years of age.

The INTERGROWTH-21st Consortium implemented three population-based studies using standardized methods and clinical and research protocols. They gathered a rich body of data on health, growth, and nutrition from pregnancy to early infancy from close to 60,000 women and newborns across five continents, making the INTERGROWTH-21st Project the largest collaborative venture in the field of perinatal health research to date.

The resulting data provide unique insights into growth and development for the 21st century. The findings also provide new ways of classifying preterm and small for gestational age newborns. In addition, a new international equation for estimating gestational age through ultrasound early in pregnancy based on the first international crown-rump length standards was produced, and the resources necessary for enabling the adoption and scale-up of these tools at all levels of the health care system were developed.

By improving the ability of clinicians to monitor growth and development, standardizing research methods, and providing maternal and newborn health programme and policymakers with new, practical, international tools, the health of women and newborns worldwide can be improved.

GFMER has been designated as one of the principle partners for the dissemination and implementation of the INTERGROWTH-21st project at a global level through its international network of health professionals and partner institutions.

The INTERGROWTH-21st course on maternal, fetal and newborn growth monitoring was jointly developed by the Geneva Foundation for Medical Education and Research (GFMER), The Global

<u>Maternal & Perinatal Health Institute (OMPHI)</u>. The course development was motivated by the commitment of the INTERGROWTH-21st Consortium to improving perinatal health globally. The course communicates the methodology of maternal, fetal and newborn growth monitoring and the application of the INTERGROWTH-21st international growth standards to make judgement about appropriateness of growth.

This open, online training course was officially launched in June 2016 with the publication of its first module "Assessing newborn size by anthropometry". The module was published first in response to the need for guidance on the correct measurement technique for newborn head circumference and an international prescriptive standard for comparisons, following the outbreak of ZIKA virus infection in some part of the world. The module already available in three languages, English, Portuguese and Spanish was translated to Italian in 2019. GFMER disseminated the course through its vast network of health care professionals in three phases: 1) Provision of training to the current participants of the annual course 'From Research to Practice: Training Course in Sexual and Reproductive Health Research 2016' as well as the participants from the 2010 to 2015 editions of the course; 2) provision of the training module to a much larger number of health care providers worldwide and 3) dissemination of the course, through the Foundation network of country coordinators, collaborating institutions and former students in selected countries. The dissemination of the course continued during 2019 and local workshops were held in four countries: Ghana, Mexico Ethiopia and Kenya in January, March, May and December 2019 respectively. As at 30 April 2019, a total of 2624 health professionals from 93 countries took the first module "Assessing newborn size by anthropometry".

A second module "Assessing maternal anthropometry and weight gain during pregnancy" was launched in January 2017. The translation of the module to Italian, Portuguese and Spanish was commenced in 2019. As at 30 April 2019, a total of 918 health professionals from 73 countries took the module.

INTERPRACTICE-21st

https://www.gfmer.ch/omphi/interpractice/index.htm

The INTERPRACTICE-21st Project promotes the optimal postnatal growth of preterm infants and standardises growth measurement in selected populations around the world. It is based on the implementation of the INTERGROWTH-21st international standards for preterm postnatal growth and evidence-based feeding recommendations based on human milk.

The "Preterm infant feeding and growth monitoring: Implementation of the INTERGROWTH-21st protocol, interactive e-Learning course" was launched in September 2017. Spanish (https://www.gfmer.ch/omphi/interpractice/index-spanish.htm), Russian (https://www.gfmer.ch/omphi/interpractice/index-russian.htm) and Portuguese (https://www.gfmer.ch/omphi/interpractice/index-italian.htm) translation of the module was done in 2019. The dissemination of the module continued during 2019 including local training in four countries: https://www.gfmer.ch/omphi/interpractice/index-italian.htm) translation of the module was done in 2019. The dissemination of the module continued during 2019 including local training in four countries: https://www.gfmer.ch/omphi/interpractice/index-italian.htm) and Senya in January, March, May and December 2019 respectively. As at 30 April 2019, a total of 1311 health professionals from 75 countries took the course.

E-learning modules – Statistics

E-learning module	Duration	No. of unique participants who completed the test	No. of unique participants who passed the test	No. of countries
Pre-eclampsia and eclampsia	June 2011 - December 2019	3766	2872	120
Postpartum haemorrhage	June 2013 - December 2019	4045	2926	128
Maternal infections	May 2015 - December 2019	1065	844	92
Obstetric fistula	July 2015 - December 2019	1058	836	98
INTERGROWTH-21st/Assessing newborn size	June 2016 - December 2019	2624	2355	93
INTERGROWTH-21st/Assessing maternal anthropometry and weight gain during pregnancy	January 2017 - December 2019	918	866	73
INTERPRACTICE-21st/Assessing preterm infant feeding and growth monitoring	September 2017 - December 2019	1311	1213	75

GFMER website (https://www.gfmer.ch/)



The GFMER website is extensive, regularly updated and provides easy access to useful information. The website contains information about the foundation, education programmes (courses), partners, international collaboration and information resources such as publications, presentations and databases. The GFMER website contains information in English, French, German, Italian and Spanish.

In 2019, the website of the foundation had 2395097 page views and visitors from all over the world. See the following link for the statistics of the website:

https://www.gfmer.ch/Usage statistics/pdf/GFMER-visitors-2019.pdf

Activities planned for 2020

Courses on sexual and reproductive health and research 2020

The Geneva Foundation for Medical Education and Research in collaboration with the World Health Organization and other partners will continue to offer a series of online training courses in the field of sexual and reproductive health and research in 2020 as follows:

- Adolescent sexual and reproductive health
- Research methodology and research protocol development
- Sexually transmitted infections, HIV/AIDS
- Family planning

Sexual health course

This e-learning course on Sexual health developed by GFMER in partnership with the World Health Organisation and UNESCO will be offered to our online course students and it will be disseminated globally to health professionals, through the GFMER and partners' networks.

GFMER collaborative activities with Oxford Maternal and Perinatal Health Institute and Harvard Maternal Health Taskforce

1. Dissemination of e-learning courses

GFMER will continue to disseminate all courses through its wide and expanding network of health professionals with ongoing monitoring. More country workshops on Newborn Anthropometry and Preterm infant feeding and growth monitoring courses are planned for the year 2020.

2. Update of e-learning courses

The update of the online course "the evidence-based management of Pre-eclampsia and Eclampsia' will be completed. GFMER will propose the update of other existing e-learning courses to its partners as necessary.

Development of new e-learning modules

GFMER and partners will explore the possibility to develop new e-learning modules in sexual and reproductive health and related fields.