

E-learning for Research Capacity Strengthening in Sexual and Reproductive Health: Experience of Geneva Foundation for Medical Education and Research



Dr. Karim Abawi

Harvard School of Public Health
29 January 2014

Introduction

- Distance learning through the use of correspondence by mail existed in 19th century.
- The globalisation of the economy and employment patterns and the rapid progress in Information and Communication Technology (ICT) have significantly increased the number of e-learning and distance education courses in various fields.
- Today many universities and other teaching entities have followed the rapid development of new technologies and computer networking.
- E-learning has been incorporated in communication, education, research and other academic activities.
- A growing number of degrees and certificates are offered through online and distance learning on a wide range of disciplines. The Internet has introduced a new mode of distribution and communication in academic fields.

Introduction (contd)

- With the increased use of distance learning and e-learning we witness an internationalisation of the training and education market.
- Students from one country can theoretically gain a qualification from another country using distance learning.
- This provides opportunity for those whose access to a training program is limited by distance, financial resources and time.
- With public funding limitations for human resource development, most governments in developing countries cannot afford to send a sufficient number of people abroad for training. With distance learning we can manage human resource capacity building and reduce costs, such as travel and accommodation, required for face-to-face training.
- Parallel to the increase of e-learning, there has been a rapid development of market to technical tools including open source software with different levels of efficacy and limitations.

Introduction (contd)

- E-learning has increasingly been used in the medical field, as medical education needs to adapt itself in the global context marked by rapid progress of knowledge and technology.
- E-learning is more practical in continuing medical education, which is an indispensable part of professional life of physician and other health service providers.
- It has the advantage of providing the opportunity for health professionals to manage the time of education themselves.
- Today the Internet is the natural tool for dialogue and interaction within the health workforce and various sections involved in service provision, prevention, education and research activities.
- Distance learning provides many benefits, especially for non-traditional learners with responsibilities (job, family, social and etc.).

The Geneva Foundation for Medical Education and Research (GFMER)

- Is a non-profit organization established in 2002.
- Is a WHO Collaborating Centre in Education and Research in Human Reproduction.
- Is supported by the Republic and Canton of Geneva, the Department of Social Affairs of the City of Geneva, and other national and international institutions.
- Has built a strong partnership with governmental and non-governmental organizations for the exchange of information and expertise at the international level and plays the role of resource center in terms of training and research.



From Research to Practice: Training Course in Sexual and Reproductive Health Research

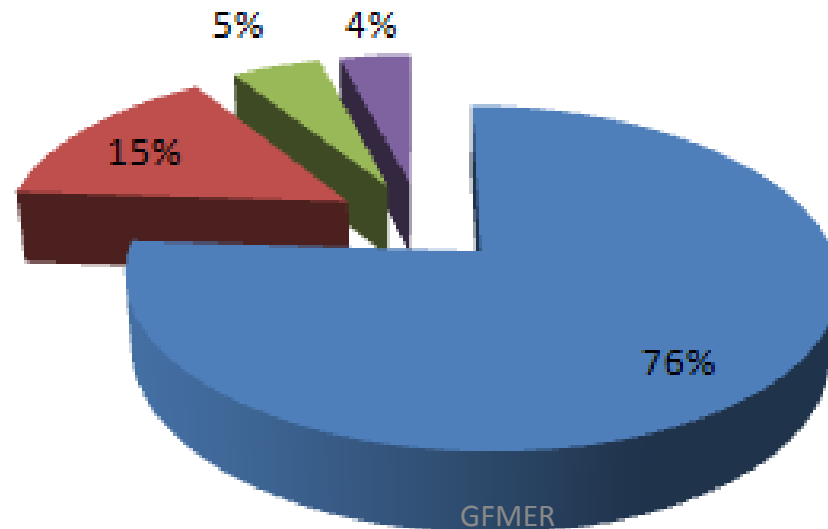
- From 2003 to 2009 it was offered to health professionals from around the globe at the WHO headquarters in Geneva.
- It was disseminated in Afghanistan, Argentina, Cameroon, China, Laos, Indonesia, and Romania through the active collaboration of participants of the course in Geneva.
- Since 2010 the course has been provided as an 8 month distance learning curriculum.

Course Participants (based on 2010-2013 statistics)

- The participants of this course are adult health professionals involved in the provision of sexual and reproductive health.

Geographical distribution of participants

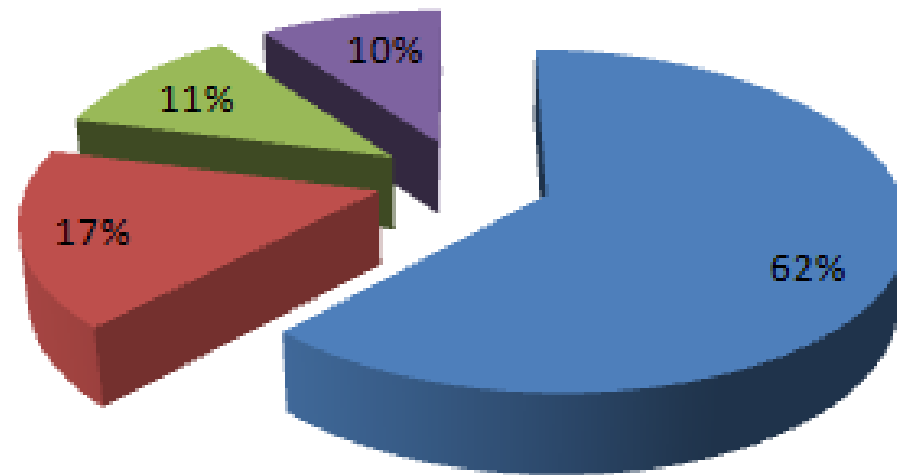
■ Africa ■ Asia ■ Europe, USA, Australia ■ Latin America



Course Participants (contd)

Profession of participants

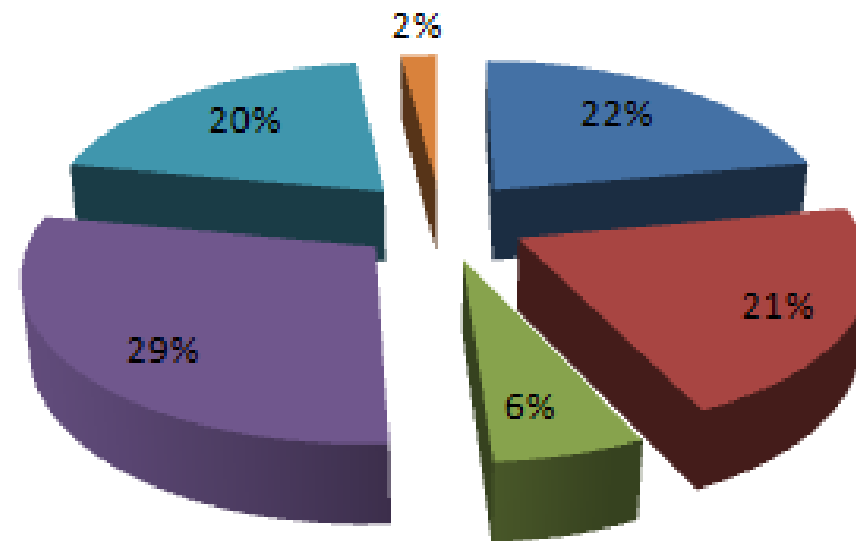
■ Medical doctor ■ Public health ■ Nurse /midwives ■ Others



Course Participants (contd)

Place of work of participants

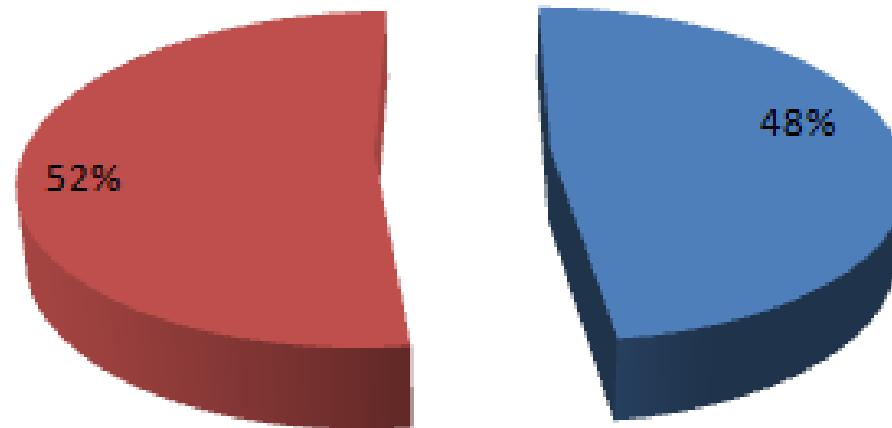
■ Health facilities (rural and urban) ■ Hospitals ■ Health ministry ■ NGOs ■ Universities ■ Private



Course Participants (contd)

Sex distribution of participants

■ Female ■ Male



Course Participants, recruitment

- Recruitment by GFMER country coordinators.
- Recruitment through the dissemination of the course by former participants of the course.
- Recruitment by Foundation partners, such as other WHO collaborating centres in different countries.
- Applicants who consult GFMER web site and found the course advertisement themselves.

Course Duration

- May-November: 7 months distance learning.
- One week Intensive training in WHO Geneva for the authors of best research projects, selected after an in-depth evaluation of participants' performance by the scientific committee of the course.



Course Content

- Maternal and Perinatal Health
- Sexually Transmitted infections, HIV /AIDS
- Family Planning
- Adolescent Sexual and Reproductive Health
- Community Genetics
- Sexual and Reproductive Rights
- Core module on Research Methods

Course Lecturers

A total of 36 teachers from:

- World Health Organization (WHO)
- GFMER
- Other national and international institutions



Learning Methods

- On-line lectures and key readings
- For each module students receive assignments from course organizers. This helps the students to become more familiar with scientific reading and writing and applying the knowledge acquired in their day-to-day professional practice.
- Interaction among the participants and between participants and course organizers through e-mail, Google Group, Skype, Facebook.
- Throughout the course, participants constantly receive guidance and support from module coordinators.
- A personal coach is assigned to each participant in-order to facilitate the learning process for him /her.

Module Validation and Final Evaluation

Module Validation:

- The participants should submit an assignment at the end of module according to stated criteria.
- Answer the Multiple Choice Questions.

Final Evaluation:

- An in-depth literature search or development of a research protocol relevant to participants' professional practice.
- In-order to obtain the certificate the participant should submit the required assignments, obtain sufficient score for MCQ and develop a research project /literature search.

Course Coordination at Country / Regional Levels



Afghanistan - Homa Kabiri



Cameroon - Gregory Edie Halle-Ekane



Egypt - Mahmoud Ahmed Mahmoud Abdel-Aleem



Ethiopia - Mengistu Asnake Kibre



Nigeria - Aminu Magashi Garba



Sudan - Khalifa Elmusharaf



India - Krishnamurthy Jayanna



Iran - Shayesteh Hajizadeh



Kenya - Ameyo Bonventure Masakhwe



Macedonia - Gabriela Tavchioska



Turkey - Ayşe Nilüfer Özaydın



Uganda - Morris Okwir



Mexico - Nayeli Martínez Cruz



Mongolia - Oyunaa Lkhagvasuren



Mozambique - Chadreque



Nepal - Anil Thapa

Course Coordination at Country / Regional Levels (contd)

Main tasks of local coordinators:

- Course advertisement
- Student recruitment
- Student coaching
- Ensure communication between students and course organizers.
- Organisation of meetings for students

Achievements

- Each year between 100-150 health professionals from around 61 countries are enrolled in this course with a success rate of 65-75 %.
- The GFMER has created a solid network among health professionals from different countries.
- Establishment of partnerships at institutional level in different countries (universities, NGO, training and research institutions, health ministries) with the help of GFMER coordinators, members and former students.
- GFMER has established a strong partnership with the **Oxford Maternal and Perinatal Health and Maternal Health Task Force of the University of Harvard** for the development and dissemination of Computer-based Interactive Training Modules.
- To date two training modules have been developed « Evidence-based Management of Eclampsia and Preeclampsia » and « Evidence-based Management of Post Partum Haemorrhage. »
- These two modules have been provided to a total of 1800 health professionals from 92 countries.
- The translation of these modules in Russian, French and Spanish is planned for 2014.

Challenges and Lessons Learnt

Drop out and student retention is the main challenge of online course. Many studies report attrition rates between 20-70 %. Based on our experience and several studies we can highlight the following factors that contribute to drop out rates:

- **Learning is a social process that happens through contact and interaction between teachers and learners and among learners themselves. This enhances students' adherence to institution academic culture, which is more likely to happen with face-to-face training than in distance learning.**
- The majority of participants of distance learning are mature adults with family obligations and other social and work commitments. For some of them their job requires frequent travels that can affect their learning rhythm.
- The learner's initial experience with eLearning may have a significant impact on a decision to drop out, as most of the drop out happens at the beginning of the training program.

Challenges and Lessons Learnt (contd)

- A participant enrolled for the first time in an online course faces multiple challenges, such as computer and internet knowledge, online communication, time management skill and ability to study alone without face to face contact with teachers and peers.
- The diversity of students' profile is another reason. An online course cannot provide one size fits all manners.
- The level of motivation is not the same for all.
- Some attend online as a hobby; others need it as a means of getting to a higher level in their jobs and some others as means for personal development.
- Learners can become quickly overloaded if they are unable to get online for a period of time and the quantity of lectures and reading materials grows to such an extent that trying to work through the backlog can be overwhelming. At this point, the decision to drop out may seem the only option.

GFMER Strategies to Cope with Drop Out and Students' Attrition

Course Structure

- All the necessary information and instructions about the course structure, i.e., course modules, modules calendar, module contents, assignments, access to teaching materials are published in a very concise short and simple text to the participants.
- Use of simple methods and software for lectures and presentations.
- Assigning a coach from the same country or region as primary contact with participant.
- Provision of timely feedback and regular follow up of students.
- Organisation of some local meetings.

Conclusion

- The success of E-Learning does not depend on technologies and applications used. It depends above all on the structure of the course. Provision of timely feedback on students' work by coaches and regular follow up of students is the essence of the GFMER course.