

Appendix V

1000+ OBGYN Meeting
February 2014 – Accra, Ghana

Presentation Abstracts

Introduction

The following abstracts were submitted by representatives from participating institutions in the 1000+ OBGYN meeting. These abstracts give context to the variety of needs and progress of the programs working to train OBGYNs in Sub-Saharan Africa. The goal of this collection is to illustrate what has been done and what needs to be done within the next decade to train 1000+ OBGYNs. It also aims to orient the various participants with the needs, specialties, and goals of each country partnership. Partnership teams were asked to submit 250 word abstracts in the following areas:

1. Physical infrastructure
2. Curriculum development in academic OBGYN departments
3. Faculty development
4. Partnership development
5. Research, monitoring, and evaluation,
6. Certification and the role of professional societies, and
7. Deployment of OBGYNs and policy

Note: Not all participating countries submitted abstracts, but are welcome to do so at any time. This is a working document that will be updated periodically.

Botswana

Partnership Program: Botswana-Penn Partnership

Partnership development in Botswana for Training

Authors:

- Doreen Ramogola-Masire,
- Jack Ludmir

Botswana has an estimated 0.4 doctors per 1,000 people, the majority of whom being foreign nationals. A total of 733 Botswana medical students graduated between 2004 and 2010 from around the world at a cost of \$250 million (USD), with only a handful returning to the country. The University of Botswana School of Medicine (UBSoM) received its first class of medical students in August 2009, and internal medicine and pediatric residency program started January 2010.

Botswana-UPenn Partnership (BUP), a collaboration between Botswana Ministry of Health, and the universities of Botswana and Pennsylvania began in 2001 to assist the country with the rollout of the anti-retroviral program. The partnership focuses on building capacity in clinical care, education, and research and offers opportunities in global health for Penn trainees and faculty. Even in the absence of an OBGYN residency program at UBSoM, an average of two 3rd year OBGYN Penn residents spend a month each at the main public teaching hospital, Princess Marina Hospital (PMH), and participate in medical student tutorials and beside teaching.

BUP fulltime in-country faculty members trained in various specialties fill important gaps in the UBSoM teaching program, as well as provide research mentorship for students, residents and faculty. BUP in collaboration with UBSoM implemented e-learning programs to enhance trainee access to medical literature and to train medical students and residents at sites far removed from the main university campus.

By focusing on collaboration with clinician-educators and researchers living in-country, we have found a model that is better adapted to capacity building than brief teaching engagements in country or sending trainees abroad.

Democratic Republic of Congo

Partnership: Universite Evangelique en Afrique-Panzi Hospital

Curriculum Development in the academic OBGYN: A case study of UEA-Panzi Hospital

Authors:

- Gustave Mushagalusa,
- Olivier Nyakio Ngeleza

The OBGYN training at UEA-Panzi Hospital started in 2011 as a pilot project. A workshop was organized in 2010 to assess the existing national curriculum and to compare it to the regional curriculum such as that of Rwanda and of Burundi.

A “learning-by-doing” model was adopted. In this model, senior residents take care of junior ones. A logbook and a daily checklist for students were developed. Each day, resident students have to make presentations at the morning staff meeting. One presentation is scheduled at each occasion. Parallel to this, each student has to perform two ‘guard’ duties weekly.

Professors provide seminars on specific topics, themes are chosen by students and usually selected from clinical cases encountered in the hospital. Lectures during the first two years are more focused on basic sciences such as anatomy, anatomopathology, and physiology. After this stage, the resident has to pass successfully an exam to receive a certificate that ascertains his/her OBGYN skills. The last three years are more clinical with a one-year training in a rural hospital setting and a thesis writing and presentation.

Faculty development at UEA-Panzi OBGYN department

Authors:

- Gustave Mushagalusa,
- Olivier Nyakio Ngeleza

For the capacity building, we are developing faculty training by doing the research within the hospital. The specialists in OBGYN are trained in research methods, statistics, writing, and oral communication skills. Because of the low number of professors, supervisors are recruited from partner universities. The thesis will be written as a compound of four to five articles. We aim to train fifteen professors until 2024.

UEA-Panzi Hospital: Partnership Development

Authors:

- Gustave Mushagalusa,
- Olivier Nyakio Ngeleza

For a new program, partnership is a key point for success. Within our program we are developing a South-South and South-North partnership. To achieve our goals, we have to look for excellence by sending our students to sister hospitals where they can acquire some skills in specific areas where are not competitive. In Africa we have a partnership with Hill Africa Hospital in North Kivu, and at present we are discussing possibilities with King Faisal Hospital in Kigali. In Europe, we are in collaboration with the CHU Geneves, the Laparoscopic in Belgium and the CHU of ANGERS. We would like to collaborate with sisters’ OBGYN program with a long experience as we can learn from them. In the South-North partnership, we are facing many challenges in terms of roles and policies.

In some cases, students are not in touch with patients, they are limited to observation.

Ethiopia

Partnership Program: St. Paul Hospital Millennium Medical College – University of Michigan

The St. Paul Hospital-University of Michigan Partnership and Development of OBGYN Residency Training Program

Author: Senait Fisseha, MD< JD, Lia Tadesse, MD, Balkachew Nigatu, MD

With support from the CDC/Twinning Center and an anonymous foundation, Dr. Senait Fisseha, MD, JD, in the U-M OBGYN department started a program in the spring of 2012 to strengthen medical education, maternal child health, and family planning in Ethiopia. In order to achieve the UN Millennium Development Goals which aim to reduce the number of maternal death by three quarters and the number of child deaths by two thirds in low and middle income countries, an OBGYN residency training program at St. Paul Hospital Millennium Medical College (SPHMMC) in Addis Ababa, Ethiopia was launched on July 1, 2012. For the last two years there have been a total of 21 residents enrolled into the program. In August 2012, family planning training was also integrated into medical education at SPHMMC for midwives, general medical practitioners, and OBGYN residents. In partnership with the Federal Ethiopian Ministry of Health (MOH), the program has greatly expanded to include a variety of departments and schools. In January 2014, the internal medicine residency program at SPHMMC was launched in addition to a maternal fetal medicine fellowship. Our presentation will highlight the steps to initiating the UM-SPHMMC partnership, challenges and barriers, and the infrastructure developed to lead the program to success and sustainability.

Ethiopia

Partnership Program: Hawassa University, College of Medicine and Health Sciences, Department of Gynecology and Obstetrics – University of Wisconsin.

Author: Zenebe Wolde, MD Obstetrician and Gynecologist

Introduction

Hawassa town is the regional capital of SNNP Region that is 275 KM away from the capital Addis Ababa. Hawassa University is one of the higher institutions in the country which encompasses variety of faculties and disciplines among which is the college of medicine and health sciences. The college is separate from the main campus, which has three schools (School of Medicine, School of Public Health and Environmental Sciences, and School of Nursing and Midwifery) and one department (Medical Laboratory Sciences). The College has got one referral teaching hospital, which is the only referral hospital in the region serving around 12 million populations. Hawassa University Referral Hospital is currently providing clinical services and it is also serving as a research and training center. There are both major and minor clinical departments and specialty services which includes Internal Medicine, Gynecology and Obstetrics, Surgery, Pediatrics, Ophthalmology, ENT, Dermatology, Radiology, Dentistry among others in the referral hospital.

Physical Infrastructure

The department of Obstetrics and Gynecology has got around 60 beds for inpatient management of cases with gynecologic and obstetric problems and it has also separate postpartum ward, separate corner for safe abortion and post-abortion care. The department has also established a separate model clinic for care of survivors of gender-based violence which is one of the three model clinics in the country. The department has also facilities to provide screening and managing of cases with pre-cancerous cervical lesions (VIA, Cryotherapy, and LEEP), and for VSC (bilateral tubal ligation and vasectomy). Currently, the department has seven general gynecologists and obstetricians, and four general practitioners who are already committed to join their post-graduate study in OBGYN. There are fourteen midwife and twenty clinical nurses assigned in the department. We have major operation room for elective gynecologic surgeries and some obstetric and gynecologic emergency operations and there is also a separate operation room primarily for emergency and elective C/S. We provide both diagnostic and therapeutic gynecologic procedures at the outpatient department including MVA, E and C, Cryotherapy, LEEP, and ultrasound scanning.

Curriculum Development

The school has gone through the initial steps to start post-graduate program in all four clinical specialties (Gynecology/Obstetrics, Surgery, Internal Medicine, and Pediatrics) and currently the candidates are applying for the program. All the four departments have developed curriculum based on the existing situation in the country. The curriculum was developed after detailed review on both local and international curricula was made, after finalizing the write up it underwent internal review and it was also commented by partners from the US (University of Wisconsin). Finally, comments were analyzed and modifications were made in the final draft. The curriculum is yet to undergo external review by experts outside the institution.

Faculty and Partnership Development

All of the seven obstetricians and gynecologists are general OBGYN specialists. As the number of

cases who need advanced care, including gynecologic oncology, urogynecology, fetomaternal medicine, gynecologic endocrinology, and infertility, is increasing and the postgraduate program is opening, we would like to create sustainable links with other universities and build the capacity of the staff. Currently, our institution has established partnership with the University of Wisconsin and Ise University in Japan.

Significance of Partnership

Creating a sustainable partnership would have significant contribution as it:

- Maximizes the quality of patient care with improved subspecialty care,
- Increases motivation of the staff and would be one means of staff retention,
- Improves the academic atmosphere, and
- Creates an opportunity for research undertaking

Therefore, collaboration with other facilities would be very much important in improving the health of mothers, improving outcome of pregnancies, enhancing the skill of medical students, residents and specialists in the facility.

Ethiopia

Partnership Program: Mekelle University & Gondar Health Sciences University – Oregon Health Sciences University

Developing a Global Women's Health Partnership: Experience from our Ethiopia Collaborations

Authors:

- Rahel Nardos, MD, MCR, Oregon Health & Science University/Kaiser Permanente, Division of Pelvic Medicine and Reconstructive Pelvic Surger
- Karen Adams, MD, Oregon Health and Science University, Obstetrics and Gynecology

In this discussion, we would like to share our four-year experience developing a uterovaginal prolapse surgery project between the division of Pelvic Medicine and Reconstructive Pelvic Surgery at Oregon health & Science University and a rural referral hospital in Western Ethiopia (Gimbi Adventist Hospital). This project was developed in response to a request by our partners to recognize and respond to the silent epidemic of uterovaginal prolapse in rural Ethiopian women. These women are at high risk for pelvic floor muscle and nerve injuries as a result of multiple vaginal deliveries, prolonged obstructed labor, a lifetime of heavy lifting and poor nutrition. Trained pelvic floor surgeons are rare in Ethiopia. Besides, rural women are too poor to afford surgery for something that is not immediately life threatening.

We will discuss important aspects of partnership development including understanding the needs of our partners, acquiring institutional approval both at home and in host country, the importance of having champions, the challenges of finding time and money to support an ongoing global medical collaboration, special considerations around medical team building, ethical and safety considerations when serving vulnerable populations, and, the importance of capacity building and sustainability. We will also discuss our ongoing effort to expand our global work through a promising multi-institutional partnership in women's health between our institution, Washington Univeristy and Mekelle University. We will discuss our vision to use telemedicine technology to strengthen this joint academic mission involving capacity building in the area of research, education, and clinical care.

Ethiopia

Partnership Program: CREOG New Program Director's School, Oregon Health Sciences University, University of Michigan, St. Paul Hospital Millennium Medical College

Faculty Development Proposal: Development of a Training Curriculum for African Residency Program Directors (Panel Discussion)

Authors:

- Karen Adams, MD, Associate Professor, Vice-Chair for Education and Residency Program Director, Oregon Health & Science University, Co-Director, CREOG New Program Director's School
- Balkachew Nigatu, MD, Residency Program Director, St. Paul Hospital, Addis Ababa, Ethiopia
- Diana Curran, MD, Residency Program Director, University of Michigan

Dr. Adams has served as co-Director of the CREOG New PD School since 2008. Drs. Balkachew and Curran are both recent participants in the school. For this panel they will present the current CREOG curriculum, highlighting the portions that would be most useful for African programs (new resident orientation, feedback and evaluation, remediation, professionalism, communication skills, motivating faculty to teach, root cause analysis, etc.) and indicating which portions would be less useful (the Match information, milestones, etc.). Dr. Balkachew will provide reflections on his experience as an African PD taking the school in the US. The panelists will then lead all conference participants in a discussion regarding creation of a PD curriculum that could be generalizable across the continent, focusing on identifying participant needs and available resources that could be shared.

Kenya

Partnership Program: Moi University School of Medicine – Indiana University School of Medicine

Development of Innovative Sub-Specialty Training in Gynecologic Oncology for Low-Income Countries

Author:

- Hillary Mabeya, MD, Moi University School of Medicine

Introduction

The burden of female genital tract malignancies in Kenya is very high. More women die from cervical cancer than any other cancer. The complexity required for the management of women with gynecological malignancies is beyond the skill set of current general obstetricians and gynecologists trained in Kenya. In response to this challenge, the Reproductive health (RH) Department of Moi University developed a curriculum (similar to a fellowship in North America) for training in Gynecologic Oncologists in Kenya. Methods: Following a needs assessment and a stakeholders meeting that included physicians and consumers, the RH department decided to initiate gynecologic oncology fellowship training in Kenya. Drawing on the success of Academic Model providing Access to healthcare (AMPATH), and its North American collaborations a two-year curriculum in gynecologic oncology was developed and approved at Moi University. Results: The program is a two-year Master of Science in Gynecologic Oncology and has enrolled two candidates. The components of the curriculum include in surgery, medical and radiation oncology, palliative care, and research. Six North American Gynecologic Oncologists travel to Kenya to provide training mentorship. When there is no visiting faculty in Kenya there is a weekly Skype call to review cases and to discuss relevant gynecologic oncology topics. Conclusion: It is possible to develop and implement a sub-specialist training in a low resource country without contributing to local brain drain in the process. This curriculum has strengthened the collaboration between partner institutions and has provided an opportunity to develop sustainable comprehensive gynecologic oncology care for women in Western Kenya.

Liberia

Partnership: Liberia College of Physicians and Surgeons – Mt. Sinai School of Medicine

Curriculum Development of OB/GYN: The Experience of the Post Graduate Residency Program in Liberia

Authors:

- Lise Rehwaldt, MD, FACOG, Visiting Faculty, OB/GYN, Liberia Post Graduate Residency Program, Liberia, Assistant Professor, Icahn School of Medicine at Mt. Sinai, NY, USA
- John Mulbah, MD, CES, FWACS, Faculty Chair, OB/GYN, Liberia Post Graduate Residency Program, Liberia College of Physicians & Surgeons (LCPS), Monrovia, Liberia
- Roseda E. Marshall, MD, MPH, MRCP, FAAP, FWACP, Council President, Liberia College of Physicians & Surgeons, Monrovia Liberia
- Stephen B. Kennedy, MD, MPH, Secretary General, Liberia College of Physicians & Surgeons (LCPS), Monrovia, Liberia
- Bernice T. Dahn, MD, MPH, Chief Medical Officer of the Republic of Liberia, Ministry of Health & Social Welfare, MoHSW), Monrovia, Liberia

The Liberian Curriculum was developed based on the Ghanaian Curriculum and then adapted to specifically fit the needs of Liberia. The proposed curriculum was then submitted and harmonized by the West African Health Organization (WAHO).

Creatively addressing the current challenges inherent with a limited number of faculty members, the formal curriculum is being supplemented by the development of Core Curriculum Modules. These modules are designed to be given over defined periods, in collaboration with “fulltime on the ground faculty” and visiting professors with subspecialty expertise from Academic Partnership/Consortium. The curriculum modules being developed include: Gyn Oncology; Obstetrical Emergencies; Ultrasound; Family planning; Critical Care/Anesthesia; Gynecological Surgeries; Urogyn-Fistual Prevention and Repair; Neonatal Resuscitation; Patient Safety/Communication; QA Model; Research Development, etc.

In the second phase of development, the plan is to take some of the curriculum modules on the road to counties throughout the country to utilize the “teach the teacher” model. A similar decentralized model is currently being utilized in fistula prevention/repair in Liberia under the leadership of Dr. John F. Mulbah. Fistula delegations travel to various district hospitals providing clinical service and training in fistula. In the future, the plan is to incorporate fistula training and cervical cancer screening program under the OB/GYN residency program. Travelling delegations of training teams will include residents. Travelling curriculum modules will focus on education in: Fistula; Emergency Obstetrics; Cervical Cancer Screening; Gynecological Surgical training; Family planning; Patient Safety, etc.

Teaching in this forum, on a local level, will reinforce the learning process for residents enrolled in the Liberian OB/GYN training Program and help to address some of the short term needs of the country with regards to providing current quality care at outer posts.

Liberia

The Fundamental Framework for the Establishment of a Post Graduate Residency Training Program in Liberia

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- Moses B. F. Massaquoi, MD, MPH, co-Chair, Technical Working Group (TWG), Liberia Post Graduate Medical Program, Liberia College of Physicians & Surgeons (LCPS), Monrovia, Liberia

The Liberian health system was severely affected by the protracted civil conflict. For example, the conflict forced many qualified and professional Liberians to flee, thereby creating significant shortfalls in the country's human resource capacity. In 2012, Liberia has approximately two hundred and fifteen (215) registered and licensed physicians in the country; of which, one hundred and forty-four (144) were Liberian doctors and less than fifteen (15) specialized clinical physicians. Of those fifteen (15) specialized clinical physicians, about half (50%) are currently practicing Liberian specialist physicians. Presently, Liberia has no in-country pathologist, urologist, neurologist, endocrinologist, anesthesiologist and oncologist, among others. This severe shortage of specialist physicians prevents the Government of Liberia (GoL) from meeting its global human resources for health index as enshrined in the 10-Year National Health Policy & Plan for 2011-2021.

Since the end of the civil crisis, the GoL, in collaboration with international partners, continues to invest in the health care delivery system. This has created the need for the establishment of a post graduate training program. Initially, the program will train specialist doctors in seven recognized Teaching Hospital across the country, covering the following core areas: Surgery, Internal medicine, Pediatrics, and Obstetrics & Gynecology, respectively. Specialists trained in these four core areas will be professionally prepared to independently manage surgical and medical cases at the highest level of competence. Other programs to be included in the future include the Faculties of Anesthesiology, Community Medicine, Psychiatry, and Family Medicine.

The global expectations of the Liberia Post Graduate Medical Training Program of the Liberia College of Physicians & Surgeons include:

1. A graduate medical education program that is sustainable and capable of producing a high-quality health workforce to provide the citizens of Liberia with highly trained healthcare specialists.
2. A graduate medical education program to strengthen the health system, promote health care and improve quality health services across the country.
3. A graduate medical education program that is one (1) of the major deliverables of the GoL through the enshrined National Health Policy & Plan that is consistent with Vision 2030.

4. A graduate medical education program that would provide a sustainable, high-quality medical specialist workforce for Liberia by 2021 and beyond.

Liberia

Health System Strengthening: The Need for An OB/GYN Post Graduate Residency Training Program in Liberia

Authors:

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There is no postgraduate training in Liberia. Training programs were outside the shores of Liberia and as such, medical graduates had to travel and stay in other countries for protracted periods ranging from four to six years. During this period, the services of these doctors were not available to Liberia. In addition, many of them never returned home after specialist training. Training manpower in foreign countries is also very expensive for the government.

Considering the constraints listed above, it was imperative to develop postgraduate training program in country to help produce specialist manpower. The advantages of this program include: Liberian graduate will be able to undergo post-graduate training in Liberia; they will be able to render services in Liberia during the training period, and the resources that are put in place ofr their training will remain in the country and will also be available to train others, and they will be more familiar to diseases that are more common and socio-cultural norms.

We expect that they will be more familiar with the environment and are more likely to stay in country, the program will provide manpower for undergraduate, post-graduate training, and the training of other health workers, and the products of this program will ensure the improvement and sustainability of quality health services in Liberia.

Liberia

OB/GYN Partnership Model for Liberia Post Graduate Residency Training Program

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Relationships between institutions arise out of relationships with individuals, then expand to institutional partnership and subsequent development of much larger consortiums. Individual relationships are based on trust and respect that develops over time. Consistent faculty members from Mount Sinai have been coming to Liberia since 2008 when the program was initiated.

In 2010, the Mount Sinai OB/GYN Department incorporated a formal Global Health rotation in GY3 and since that time, Mount Sinai residents have rotated on a regular basis in Liberia with Attending Physicians. This opportunity has changed their relationship with the global world, allowing them to experience and learn about health care in a low resource setting where they must rely on their clinical acumen and awareness of the cultural community they are practicing in. Many residents have returned during GY4 and continue to participate after graduation.

Capacity Building has been the key focus of many of these missions. Prior to this year, there was no opportunity for formalized subspecialty training in OB/GYN in Liberia. Residents, after completing their one year internship, were required to participate in a 6-month intensive emergency obstetrical/surgical training program offered at 3 different sites, prior to being sent to assigned outposts where they function often independently. Faculty that were involved in those early training sites from various institutions, are presently being recruited as faculties for the Liberian Post Graduate OB/GYN faculty, reiterating the point that individual relationships that developed over time are the basis for collaboration and consortium building.

Moving forward in the development of the Liberian OB/GYN Residency program, there will be significant exchange between residents in Liberia and their Academic partnership(s). Mount Sinai residents will continue to rotate in Liberia, with greater consistent presence and under the supervision of “full time on the ground Mount Sinai faculties”, Liberian faculties and rotating faculties. Senior residents and fellows are excellent educators and greater consistent presence will allow for more meaningful collaborative research opportunities with Liberian colleagues.

Senior residents from the Liberian program will also have the opportunity to rotate at Mount Sinai in PGY3 where they will gain exposure to things they may have not encountered at home and they will also be able to share their honed clinical experience with their Mount Sinai colleagues.

The potential for meaningful exchange in both directions becomes even more vibrant when one expands beyond our current institutional partnerships and begins to develop consortiums with other

academic institutions, both locally and abroad. The global collaboration provides even broader opportunities for creative ways to educate our residents, clinically and culturally, both in the United States and Sub-Saharan Africa (SSA), respectively.

Malawi

Partnership Program: Malawi College of Medicine – University of North Carolina

Malawi Post-Graduate Masters in Medicine (MMED) Program

Author:

- Jeffrey Wilkinson, MD, MPH, University of North Carolina

The post-graduate Masters in Medicine (MMED) program in Obstetrics and Gynecology at the Malawi College of Medicine (COM) was inaugurated in October 2013. The COM had an approved curriculum for the program since 2006, but initiation was delayed due to lack of funding and sufficient numbers of faculty. Prompted by a commitment by two private donors with matched funds by the US Centers for Disease Control (CDC), the MMED program coalesced rapidly with the following dedicated partners committing to provide faculty, technical assistance and medical equipment: Malawi College of Medicine, The Norwegian government and medical colleges, University of North Carolina, Baylor College of Medicine, Loma Linda University, the US CDC via I-Tech (a health sector NGO) and the Bill and Melinda Gates Foundation.

The nature of the multi-institutional and multi-national collaborative effort in Malawi is a potential strength of this program as well as a potential weakness. The academic and clinical strengths of the contributing institutions will foster unparalleled exposure for the trainees. The multi-layered funding for the program may provide some flexibility if one or more partners is unable to contribute on a temporary or permanent basis. However, potential challenges arise with coordination of funding, management of institutional expectations, maintenance of relative parity between and within institutions and organization of learning opportunities for external trainees, to name a few. By strengthening the capacity of the COM faculty (currently led by Dr. Ron Mataya and Dr. Grace Chiudzu) and the national Association of Gynecology and Obstetrics, it is anticipated that these challenges can be met. We're hoping to learn from other collaborative post-graduate training programs at the meeting in Accra.

Other

Program: Elevate Health, UMC Utrecht

Online Pilot Course in the Management of Hypertensive Disorders During Pregnancy

Authors:

- Renee Filius, Elevate Health,
- Joyce L. Browne, Elevate Health

In collaboration with consortium members, Elevate Health creates a pilot course, which includes a pilot course evaluation with key consortium members. Topic of the pilot course will be hypertensive disorders in pregnancy (HDP), one of the four major causes of maternal mortality and morbidity. Name of this pilot course will be 'Hypertensive disorders in pregnancy'. Target audience will be OBGYN residents with clinical experience allowing for an advanced level course. The course will consist of an eight-hour specific course. The content will be consortium driven and established at the February meeting. The course will be further developed between Feb-June 2014.

Elevate would like to give a short presentation which includes topics such as:

- Curriculum Development in Academic OBGYN Departments
- Faculty Development
- Accreditation, Certification & Professional Societies

Our presentation(s) will include:

Part One: Demonstration

- Demonstration of the Virtual Learning Environment
- Demonstration of teaching tools, relevant examples
- Innovative clinical teaching models that could be used
- Collaboration between consortium members and Elevate Health

Part Two: Pilot Course and Curriculum

- Design of the pilot course
- Content and course material
- Development of the pilot course
- Recording of the lectures
- Planning of the pilot course development (who, what, when)
- Teaching the pilot course
- Evaluating the pilot course
- Accreditation and Certification
- Further Curriculum Development

If possible, we would like to split these parts into two presentations of each 15 minutes. The presentations contain information, which we think is necessary for the consortium members.

Program:

**Curriculum Development in Developing Nations:
Lessons Learned in Female Pelvic Medicine**

Author:

- Lauri J. Romanzi, MD

As academic medicine in developing nations strives to reflect and implement Ministry of health and Public Health goals, reproductive health morbidities, the “stuff” of Female Pelvic Medicine and Reconstructive Surgery (FPRMS), may or may not be at a stage of intensive focus, relative to reproductive health mortality reduction resource allocation.

As a result, silo funding of the most egregious morbidities, such as lack of family planning and genital tract fistula, has been the focus of WHO, UNPFA, and international NGO campaigns. Hyper-focused clinician training, often in intermittent “camp” settings, is to be congratulated for catalyzing many Ministry of Health efforts to address these morbidities, through the “recognition, resource allocation, general implementation” evolution that now has reached the academic training level.

One prime example is the evolution of programs devoted to obstetric fistula, an eradicable morbidity caused by obstructed labor, to include evaluation and management of other, non-eradicable, pelvic floor morbidities (prolapse, incontinence, etc.). This natural progression is wedded to promotion of obstetric skills competencies, academic training and community awareness that hastens the eradication of obstructed labor, and thereby obstetric fistula, as occurred in the late 1800’s in North American and Western Europe.

Models to be discussed include:

- Triumphs and flaws of the silo-funded model (Pakistan, DR Congo)
- Intermittent recurrent training in a residency program (Somaliland, DR Congo)
- Full time FPMRS curriculum development within established, government funded academic OBGYN programs (Nepal, Rwanda).
- Intermittent subspecialty professional organization (IUGA Ghana Project) mentoring of an established academic center Urogynecology Fellowship program (Ghana).

Program: **Jhpiego**

Authors:

- Jean Anderson, MD
- Ricky Lu, MD
- Blami Dao, MD
- Peter Johnson, CNM
- Harshad Singhvi, MD
- Johns Hopkins University
- Jhpiego

Jhpiego is an international affiliate of Johns Hopkins University working in women’s health for over 40 years and currently working in more than 50 limited resource countries, primarily in sub-Saharan Africa and Asia. This presentation will describe Jhpiego approach and experience in training at the preservice level addressing issues including maternal and neonatal health (antenatal care, emergency obstetric care, malaria in pregnancy, preeclampsia, postpartum hemorrhage), HIV, and PMTCT,

family planning and prevention of cervical cancer, and infection control and prevention. Basic principles include working through local leadership, engaging relevant stakeholders, comprehensive needs assessment, and development of quality assurance mechanisms. Successful activities in support of curriculum development and faculty support have involved the following:

- Identification, nurturing and supporting local champions for change,
- Strengthening teaching skills of OBGYN faculty using competency-based approaches and evidence-based guidelines,
- Strengthening curricula by review of existing materials and updating, incorporation of more interactive, team-based approaches and standardized pre- and post-test evaluations,
- Use of skills laboratories with simulation (e.g., IUD insertion, neonatal resuscitation),
- Interactive, multi-media clinical case study-based e-learning and support, and,
- Use of OSCE for learning and assessment/evaluation.

Rwanda

Program: Human Resources for Health – Albert Einstein College of Medicine

Development of Einstein Partnerships in Obstetrics & Gynecology and Women’s Health across Sub-Saharan African Countries February 12-14, Accra, Ghana

Authors:

- Irwin R. Merkatz, MD
- Diana Wolfe, MD, MPH

The institutional mission of the Albert Einstein College of Medicine’s (Einstein) Global Health Center is to “promote the ideal of health for all”. The Center’s goals and objectives include the domains of education, research, and service with the ultimate goal of reducing disparities in health and alleviating human suffering. Faculty from the Department of Obstetrics & Gynecology and Women’s Health, committed to reducing maternal mortality and morbidity and previously worked in Haiti and Sub-Saharan Africa. Sites include the Democratic Republic of the Congo, Ethiopia, Ghana, Rwanda and Uganda. In 2012 the Department joined the Clinton Health Access Initiative with a 7-year commitment to the Human Resources for Health Program in Rwanda. The role of the faculty is to facilitate the training of residents primarily at the University Hospital at Butare as well as in Kigali. Departmental faculty members have been on site in Rwanda continuously for the past two years. Since 2007, Departmental faculty members have also voluntarily contributed to the training of local physicians and health workers in the rural environment of Kibogora, Rwanda, and have established an ongoing birthing center. Most recently, the World Bank selected the Department and its newest collaborating partner, “Saving Mothers Giving Life”, to receive a capacity building grant in Uganda testing a mobile phone application for improving access to emergency obstetric care.

The Department is one of the largest and most diverse in the United States (US), for the annual training of 46 residents and 23 sub-specialty fellows. Two Ghanaian Professors of maternal Fetal Medicine are actively involved in this educational responsibility. The community we serve is the Bronx, NY which in particular is the home to the majority of Ghanaians in the US. The 2011 US Census reported a total of 108,389 American of Ghanaian background.

Einstein’s Chairman of Obstetrics & Gynecology and Women’s Health, Dr. Irwin R. Merkatz, proposes to partner with Ghanaian physician educators in the training of Ghanaian OBGYN residents at a semi-urban district hospital site in the Akuapem Ridge. In keeping with the national goal of increasing OBGYN providers, the proposal is endorsed by the Ghana College of Physicians and Surgeons and will be housed at the Tetteh Quarshie Memorial Hospital. The clinical experiences and exchange of both culture and language gained through this partnership will benefit the mutual communities we serve in both Ghana and the Bronx populations.

Albert Einstein College of Medicine (Einstein) Teaching Program for OBGYN Residents in Rwanda

Authors:

- Irwin R. Merkatz, MD
- Sierra Washington, MD

The Albert Einstein College of Medicine (located in the Bronx, NY, USA), in partnership with the

Human Resources for Health Program (HRH), has placed member of the full time faculty fo the Department of Obstetrics & Gynecology and Women’s Health at the Butare University Teaching Hospital (BUTH) in Rwanda. These faculty members have been charged with three main objectives:

1. Curriculum development and didactic teaching for postgraduate students in OBGYN,
2. Improving the quality of care for pregnant and non-pregnant women through promotion of evidence-based medicine, and,
3. Creating systems for internal monitoring and quality improvement.

Curriculum Development and Didactic Teaching

In collaboration with other HRH faculty, the Einstein faculty members have created a standardized two-year cycling lecture series that covers all topics outlined in the Rwandan OBGYN postgraduate training curriculum. These lectures are given concurrently at both main teaching hospitals in Rwanda in order to standardize the postgraduate learning experience. Basic surgical skills workshops and simulation labs are included in the lecture series. Competency-based evaluations of clinical skills, surgical skills, communication techniques, medical knowledge, and professionalism are implemented quarterly and annually for postgraduate evaluations.

Improving Quality of Care Through Evidence-Based Medicine

The Einstein faculty members have focused on improving the quality of care through evidence-based bedside teach and structured morning report. In the operating theatre, emphasis is placed on teaching sterile technique and development of new surgical skills.

Internal Monitoring and Quality Improvement

The Einstein faculty members have also assisted the BUTH Department of OBGYN in creating a system of ongoing maternal morbidity/mortality audits and monthly infection control reviews. Through these processes, we seek to assess areas for improvement and implementation of feasible solutions. The Einstein faculty members have also assisted in the responsibility to provide District Hospital supervision and tracking data to improve a base for quality improvement. Through these three interventions at BUTH, we aspire to train a new generation of OBGYNs in Rwanda who use evidence-based medicine, possess excellent surgical skills and have developed a practice of life-long learning.

Uganda

Program: Makerere University – University of California, San Francisco

OBGYN Post-graduate Training at Makerere University

Authors:

- Josephat Byamugisha, MD
- Meg Autry, MD

Although UCSF as a whole – particularly Infectious Disease – has had a very strong relationship with Mulago Hospital and Makerere University for twenty years, the Department of OBGYN has only had a loose relationship until approximately five years ago. At that time, an OBGYN faculty contingent traveled to Kampala and met with stakeholders and performed a needs assessment for a stronger affiliation. The needs assessment revealed surgical skills transfer for faculty and residents, faculty development, and research collaboration as key areas of interest. We have hired a global health faculty with 40% time availability on the ground. We were able to complete and publish a remote surgical skills study, introduce laparoscopy, and combine with Global Partners in Anesthesia and Surgery to sponsor a senior scholar. We are working hard with the oncology division to develop skills and improve diagnosis and treatment. We have made advances with radiation oncology in Mulago. We have established a resident rotation and have been able to bring one Ugandan contingency to UCSF and APGO. We are working on volunteer clinical faculty positions at UCSF for appropriate Ugandan faculty. One mid-level Ugandan faculty has applied for a Fogarty and we have made it to the Gates Grand Challenges finals. We have one R21 looking at fistula reintegration. Challenges include funding, needing more on-the-ground time for UCSF faculty, bilateral exchange, subspecialty training, and infrastructure issues. Funding can be further divided into UCSF faculty support, bilateral exchange, research seed money, and initiative funding.

Uganda

Program: Mbarara University of Science and Technology-Mass General Hospital Collaboration

Mbarara Surgical Services Quality Assurance Database (SQUAD)

Authors:

- Joseph Ngonzi, MD
- Blair Wylie, MD

Hospital leadership at the Mbarara Regional Referral Hospital (MRRH) in Uganda recognized that access to accurate data on clinical outcomes is central to any and all efforts to improve patient care. With technical and financial support from Massachusetts General Hospital, a prospective database was established in the Spring of 2013 at MRRH for quality improvement at the hospital. Data clerks dedicated to the project enter information onto SQUAD laptops on all surgical and obstetric admissions into a Microsoft Access database. Information is gathered from hospital records; missing or confusing information is clarified with the managing clinician in real time. Data recorded includes patient demographics, indications for surgery, time between decision for surgery and completion of procedures, details of anesthesia, use of antibiotics, equipment failures, missing supplies, and clinical outcomes. For obstetric admissions, additional information on labor/delivery complications, method of delivery, and neonatal and maternal outcome are captured.

Data entry began on August 1st, 2013. In the first four months, data from 547 gynecologic ward admissions and 3,016 obstetric ward admissions were abstracted. Current efforts include:

1. Verification of the accuracy of the collected data,
2. Monthly summary information feedback to the OBGYN department, and,
3. Improved linkage with the pediatrics department to increase the ability to track newborn outcomes. Data generated from the SQUAD project will be the foundation for clinical improvement and research projects in the obstetric/gynecology department at MRRH.

Establishing Partnership Goals In A New Collaboration

Authors:

- Joseph Ngonzi, MD
- Blair Wylie, MD

In response to an effort by Mass General Hospital's (MGH) Center for Global Health to expand and strengthen its relationship with the Mbarara University of Science and Technology across all hospital departments, faculty from MGH's Department of OBGYN travelled to Mbarara in 2011. During this exploratory trip collaboration goals were outlined that focused on three major areas (research, education, quality improvement). The list generated, abbreviated below, serves as a working template for the partnership around which efforts are measured and fundraising efforts targeted.

A. Research

- *Research mentorship of MRRH OBGYN residents:* Pair MRRH OBGYN residents with MGH faculty to serve as secondary research advisor. Seed funds for MRRH projects.
- *Research mentorship of MRRH OBGYN faculty:* Provide research mentorship to MRRH faculty – share grant opportunities, editorial advice for grants and manuscripts, study design input. Travel support for MRRH faculty to international meetings.
- *OBGYN Glocal Health Fellowship:* Establish fellowship for US OBGYN graduate to work in Mbarara
- *MGH CAMTech Institute field site:* Develop research capacity for MRRH to serve as field site for MGH technology innovations designed to improve maternal and newborn care.

B. Education

- *Resident rotations:* Create opportunities for MGH residents to rotate to Uganda and Ugandan residents to rotate to MGH.
- *Residency positions:* Fund MMed positions for Ugandan physicians.
- *Teleconference:* Establish case-based monthly teleconference between institutions.

C. Quality Improvement

- *QI Database:* Develop database for gynecologic surgeries and obstetric deliveries for quality improvement projects and foundation for research questions.
- *Supply requests:* Procurement of needed supplies/equipment (emergency C-section supply cabinet, colposcope).