

WHEC Update

Briefing of worldwide activity of the Women's Health and Education Center (WHEC)

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Achieving Global Health

Telecommunications technology spans distance and crosses borders to bring health care services to rural and underserved communities and clinics, all over the world. The Women's Health and Education Center's (WHEC's) initiatives with the United Nations (UN) and the World Health Organization (WHO) in health development with special focus on maternal and child health, are serving in 227 countries and territories with 14 million subscribers every year. Our Working Group explores in this edition – how the technology might be applied in routine as well as specialized health care, to achieve Universal Health Care (UHC). This is the way forward to provide health care to poor and vulnerable population in remote locations, in rich and poor countries alike.

Our colleagues and friends in developing and Least Developed Countries (LDC) and at primary level clinics can use telehealth and telemedicine as aids in treating their high-risk patients, such as those with high-risk obstetrics and newborn care. Physicians from tertiary health care centers can consult through a face-to-face conversation that takes place through telecommunications. The result is that the quality of care for women and children in our communities is improving. We thank you for your contributions and efforts. This is the clear and present future of the practice of the medicine.

Genetic counseling, infertility consultation and fetal anomaly management are some of the other applications. Our Working Group is discussing different ways to improve patient care and ways to collaborate with our initiatives around the world. Ultimately, we are developing best practices – a model for the best uses of technology to improve women's health care globally. Our Working Group is a diverse group of members from all over the world, represents the spectrum of practice of medicine. Although our group has various level of telehealth experience, we all are very interested in these new channels of communication and health care delivery, to make health care affordable for all.

Technology and its availability are the most important topics for the task force. While some communities have Internet service, not all do. We need to determine which areas service, how much it would cost, and who pays for it. Can a hospital and/or a practice, and/or their partners can afford it? Identifying partners in tertiary care health centers is on our agenda. We are encouraging a broad range of experts to study all the components and associated costs of technology, licensing, and cross-state credentialing. Gathering this information will help in developing a best-practices model that general healthcare provider can use.

Telehealth is redefining aspects of care and services that can be done remotely. We are making progress in rural and underserved communities around the world. Collaborating with a health care network that has a hospital in a town, we set up a pilot program to provide telemedicine services. In this kind of service, which occurs entirely in real time, ultrasound images taken at the hospital are streamed by high speed fiberoptic cable to our centers, where the physicians from tertiary centers can view them. If a repeat image is needed the physician can request another scan. Our patients and customers prefer video chatting with the physicians and most of the people are comfortable with the technology.

Federal and state entities need to determine how the country's information be improved to give rural access to high-quality, high-speed, wide-bandwidth communications in rural and remote areas. As barriers fall and telehealth improves, acceptance by patients and health care providers of all levels will increase. Create an account and join us on **WHEC Global Health Line (WGHL)**. http://www.womenshealthsection.com/content/cme/WHEC Global Health Line.pdf

Telehealth & Telemedicine in Global Health

Rita Luthra, MD



Are the terms telehealth and telemedicine same? Does telehealth help to address relative shortages (maldistribution of clinicians) and absolute (too few specialists) physicians in rural and remote areas?

Defining Telehealth and Telemedicine – An Affordable Solution: These two terms are similar, but different. They are often used interchangeably. Telemedicine is the older phrase, while telehealth entered the vernacular more recently and encompasses a broader definition.

The HealthIT.gov website explains the differences in terminology this way:

- The Health Resources Services Administration defines telehealth as the use of electronic
 information and telecommunications technologies to support long-distance clinical health care,
 patient and professional health-related education, public health and health administration.
 Technologies include videoconferencing, the Internet, store-and-forward imaging, streaming
 media, and terrestrial and wireless communications.
- Telehealth is different from telemedicine because it refers to a *broader scope of remote health* care services than telemedicine. While telemedicine refers specifically to remote clinical services, telehealth can refer to remote non-clinical services, such as provider training, administrative meetings, and continuing medical education, in addition to clinical services.

WHO Report 2010, however uses the two terms synonymously and interchangeably, defining telemedicine as:

The delivery of health care services, where distance is a critical factor, by all health care
professionals using information and communication technologies for the exchange of valid
information for diagnosis, treatment and prevention of disease and injuries, research and
evaluation, and for the continuing education of health care providers, all in the interests of
advancing the health of individuals and their communities.

The American Telemedicine Association (ATA) describes their use of terms this way:

• ATA largely views telemedicine and telehealth to be interchangeable terms, encompassing a wide definition of remote healthcare, although telehealth may not always involve clinical care.

WHEC initiatives suitable to telemedicine:

The four elements of our activities to improve maternal and child health worldwide are:

- 1. Its purpose is to provide clinical support;
- 2. It is intended to overcome geographical barriers, connecting users who are not in the same physical location;
- 3. It involves the use of various types of Information and Telecommunication Technologies (ICT);
- 4. Its goal is to improve health outcomes.

Globally, developed countries are more likely than developing countries to have, or to have begun implementing a national telemedicine policy or strategy; however, significant growth in this area is forecast for developing countries. The African, Eastern Mediterranean and South-East Asian Regions currently show the lowest rates of national telemedicine policy implementation, but the highest projected growth. These regions may require extra support in the development of telemedicine policies and strategies in the near future.

WHEC and its partners will facilitate the flow of information by supporting forums on telemedicine to inform policy-makers and users of telemedicine programs. We will continue to disseminate strategic information, telemedicine applications, best practices, and evaluation.

Join the efforts!



United Nations at a Glance

Permanent Mission of Guinea-Bissau at the United Nations

Guinea-Bissau became UN Member State on 17 September 1974



Guinea-Bissau, officially the **Republic of Guinea-Bissau** is a sovereign state in West Africa. It covers 36,125 square kilometers (13,948 sq. mil) with an estimated population of 1,815,698. Guinea-Bissau was once part of the kingdom of Gabu, as well as part of the Mali Empire. Parts of this kingdom persisted until the 18th century, while a few others were under some rule by the Portuguese Empire since the 16th century. Upon independence, declared in 1973 and recognized in 1974, the name of its capital, Bissau, was added to the

country's name to prevent confusion with Guinea (formerly French Guinea). Guinea-Bissau has a history of political instability since independence, and no elected president has successfully served a full-five years term.

Only 14% of the population speaks noncreolized Portuguese, established as both the official and national language. Portuguese exists in creole continuum with Crioulo, a Portuguese creole spoke by half the population (44%) and an even larger number speaks it as second language. The reminder speaks a variety of native African languages. There are diverse religions in Guinea-Bissau with no one religion having a majority - 40% Muslims, 22% Christians, 15% Animists and 18% unspecified or other. The country's per-capita gross domestic product is one of the lowest in the world.



Guinea-Bissau is a member of the United Nations, African Union, Economic Community of West African States, Organization of Islamic Cooperation, Community of Portuguese Language Countries, La Francophonie and the South Atlantic Peace and Cooperation Zone and was a member of the now defunct Latin Union.

World Bank Report – World Development Report

Guinea- Bissau's economy continues to expand in spite of political gridlock and the suspension of donor flows to the country. Following growth of 5.1% in 2015, real Gross Domestic Product (GDP) growth was projected at above 5.1% for 2016 (primary estimates) compared to 3.7% in 2015. Project grants fell by about 22% in 2016, accounting for most of the 10% decline in total revenues. Locally funded capital projects were frozen, while those activities funded by external sources were cut in half. Government operations were funded primarily from domestic and regional sources. http://www.worldbank.org/en/country/guineabissau

Real GDP growth is projected to average 5% over 2016-2018. The pickup in growth reflects the assumption that output from the agriculture sector will remain fairly robust, and that political stability is achieved to allow for a return of donor financing that would support a recovery in the secondary sector. Bank portfolio in Guinea-Bissau – as of September 2017, the portfolio in Guinea-Bissau comprises four projects amounting to 90.61 million. The overall percentage disbursement as of June 30, 2017 is estimated at 41.5%. Overall portfolio is Moderately Satisfactory. To boost country portfolio performances, a Country Portfolio Performance Review (CPPR) was held in March 2017 to stress key constraints, such as the lack of fiduciary in the country. Guinea-Bissau's portfolio also comprises two regional projects amounting to \$ 84 million. Most of the regional portfolio relates to: (i) Energy, such as the OMVG interconnection project; (ii) and Fishery projects. Overall, the size of the portfolio is expected to increase significantly with the coming three years with the IDA18 allocation of \$87.5 million.

Details: https://www.un.int/guineabissau/

Collaboration with World Health Organization (WHO)

WHO | Guinea-Bissau



Health Situation

The WHO estimates there are fewer than 5 physicians per 100,000 persons in the country, down from 12 per 100,000 in 2015. The prevalence of HIV-infection among the adult population is 1.8%. Only 20% of infected pregnant women receive anti-retroviral coverage to prevent transmission to newborns. Malaria kills more residents; 9% of the population have reported infection. It causes three times as many deaths as AIDS. In 2015, fewer than half of

children younger than five slept under antimalaria nets or had access to ani-malarial drugs.

The WHO's estimate of life expectancy for a female child born in 2015 was 49 years for women, and 47 years for men. Despite lowering rates in surrounding countries, cholera was reported in November 2012 to be on the rise, with 1,500 cases reported and nine deaths. A 2008 cholera epidemic in Guinea-Bissau affected 14,222 people and killed 225.

In 2015 maternal mortality rate per 100,000 births for Guinea-Bissau was 1,000. This compares with 804.3 in 2008 and 966 in 1990. The under-5 mortality rate, per 1,000 births, was 195 and the neonatal mortality as a percentage of under-5 mortality was 24. The number of midwives per 1,000 live births was 3; one out of 18 pregnant women die as a result of pregnancy. According to a 2015 UNICEF report, 50% of women in Guinea-Bissau had undergone female genital mutilation. In 2017, Guinea-Bissau had the 7th highest mortality rate in the world.

Global Nutrition: To improve maternal, infant and young child nutrition

Guinea-Bissau: WHO Member States have endorsed the Global Nutrition Targets for improving maternal, infant and young child nutrition. The Global Nutrition Monitoring Framework helps countries monitor progress towards the Global Targets, measuring outcomes, processes and policies. The recent data from Guinea-Bissau is:

- 40% reduction in the number of children under-5 who are stunted;
- 50% reduction of anemia in women of reproductive age;
- 30% reduction in low birth weight;
- · No increase in childhood overweight;
- Increase the rate of exclusive breastfeeding in the first 6 months up to at least 50%;
- Reduce and maintain childhood wasting to less than 5%

Details: http://www.who.int/countries/gnb/en/

Bulletin Board

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About WHEC Practice Bulletin

The emphasis on evidence-based medicine has taken on new and greater importance as the environment of clinical medicine grows more diverse, with increased access to more information by both physicians and patients and the changing allocation of resources. Practice guidelines are a formal synthesis of evidence, developed according to a rigorous research and review process. Each section is devoted to a particular series. These series are developed by committees of experts and reviewed by

leaders in the specialty and the editorial board of the Women's Health and Education Center (WHEC) – the Principal Publisher of http://wwww.WomensHealthSection.com

The contribution of the many groups and individuals who participate in the process is gratefully acknowledged. As the practice of medicine evolves, so too do WHEC Practice Bulletins.

Our e-Health platform educates health care professionals about conditions that are exclusive to women, children, more prevalent in women and children, or are diagnosed or treated differently in women and children versus men. The publications present unbiased, comprehensive, concise, and clinically relevant review articles and practice sections. The articles are peer reviewed to maintain the highest quality and to verify clinical relevance, medical accuracy, and clarity of presentation. The most insightful and thought-provoking articles are now available in a single portal.

All WHEC Practice Bulletins are reviewed in 18 to 24 months after publication and are revised, reaffirmed, or withdrawn.

Welcome to the WHEC Working Group!

Authorship & Policies:

http://www.womenshealthsection.com/content/documents/AuthorshipPolicies.pdf



Collaboration with UN University (UNU)

UNU-WIDER (World Institute for Development Economics Research)
Expert Series on Health Economics

Guinea-Bissau: War, Reconstruction and Reform

In June 1998, Guinea-Bissau was thrown into conflict by a military revolt. This led to 11 months of fighting, extensive loss of life, and the displacement of up to a third of the country's population. This study discusses the political economy of the conflict, the difficulties in negotiating its end, and the tasks that now face donors and national actors in creating a state capable of directing the development process. Formidable constraints exist including the government's dire fiscal situation, the demands of the army, and an unstainable debt position. The study argues that the current institutional distinction between emergency relief and development aid hinders an effective focus on conflict preventions and proposes a 'Win-Hold-Win' strategy for donors in their efforts to achieve reconstruction, political stability and economic reform. This study concludes by stressing the wider implications of Guinea-Bissau's experience and challenges it still faces.

The authors stressed uneasiness about attributing conflict to a fundamental failure and weakness of the state, as this tends to eclipse other contributing factors as *the* dominant cause of conflict. Guinea-Bissau shows how a weak state can survive for decades without falling into outright conflict and without making excessive direct claims on society. This study has uncovered a number of additional factors contributing to the decline into war, but the 'weaknesses of the government remains the key explanatory factor. The international donor community has buttressed the existence of the state over many years – although by default, rather than by intent. It is therefore time for donors to recognize this responsibility and contribute, in a coherent and concerted way, to the difficult task of establishing a legitimate and accountable state. While much else needs to be done, this does appear to be critical to securing a peaceful future for Guinea-Bissau.

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Agency-Sida), and the Government of the United Kingdom (Department for International Development). These agencies can accept no responsibility for any information provided or views expressed.

Details of the paper can be accessed from the link of UNU-WIDER on CME Page http://www.WomensHealthSection.com/content/CME



Girls Education in Africa: What do we know about strategies that work?



Low levels of educational attainment – especially among women – represents a very serious constraint on development in most Sub-Saharan African countries. This constraint hampers progress for individuals as well as for nations. At the *individual* level, education is the ultimate *liberator*, empowering people to make personal and social choices. Education is also the ultimate *equalizer*, particularly in promoting greater equity for women, and for the poor and disadvantaged group since education often is the only capital such groups

can aspire to acquire. At the *national* level, educated citizens are the foundation for *well-functioning democratic institutions*, and for achieving *social cohesion*. Education beyond a certain level is also a necessary (but not sufficient) condition both for creating, applying and spreading the new ideas and technologies critical to achieving the *economic growth* required to reduce poverty *and* creating the human capital among the poor needed for them to benefit from that growth. Educating girls and women is critical to achieving these benefits as well as for improvements in the areas of *health*, *fertility and nutrition*.

Another conclusion is that much of the literature and documentation on strategies fails to provide enough information on circumstances, costs and outcomes to draw sound conclusions about what works, where and why. But girls cannot wait upon extensive new extensive studies.

A concentrated global effort is required to ensure accelerated progress towards attaining the gender parity goal. To achieve this goal is both a moral imperative and a development necessity.

Examples of strategies that appear to have a positive impact

- 1. Cross-sectoral interventions;
- 2. Multiple interventions;
- Gender-neutral interventions:
- 4. Educational quality improvements, including: alternative programs, bilingual programs, local/female teachers, single sex schools/classes;
- Addressing costs:
- 6. Reducing distance to school;
- 7. Read community participation.

We hope you join our partners and various WHEC's Initiatives for Global Health.

https://www.unicef.org/what-we-do

To be continued....

Two Articles of Highest Impact, May 2019

Editors' Choice – Journal Club Discussions
Our friendship has no boundaries. We welcome your contributions.

- 1. End-of-Life Decision Making; http://www.womenshealthsection.com/content/heal/heal022.php3 WHEC Publications. Funding: WHEC Global Initiatives are funded by a grant from an anonymous donor. Join us at WHEC Global Health Line for discussion and contributions.
- 2. Neonatal Jaundice: Part II: http://www.womenshealthsection.com/content/obsnc/obsnc006.php3 WHEC Publications. Funding: WHEC Global Initiatives are funded by a grant from an anonymous donor. Join us at WHEC Global Health Line for discussion and contributions.



Telehealth & Sustainable Development



Telehealth involves the use of telecommunications and virtual technology to deliver health care of traditional health-care facilities. Telehealth, which requires access only to telecommunications, is the most basic element of "e-Health," which uses a wider range of information and communication technologies (ICTs).

Telehealth examples include virtual home health care, where patients such as the chronically ill or the elderly may receive guidance in certain procedures while remaining at home. Telehealth has also made it easier for health care workers in remote field settings to obtain

guidance from professionals elsewhere in diagnosis, care and referral of patients. Training can sometimes also be delivered via telehealth schemes or with related technologies such as e-Health, which make use of small computers and internet.

Well-designed telehealth schemes can improve health care access and outcomes, particularly for chronic disease treatment and for vulnerable groups. Not only do they reduce demands on crowded facilities, but they also create cost savings and make the health sector more resilient.

Since remote communication and treatment of patients reduces the number of visits for health services, both transport-related emissions and emissions related to operational requirements are reduced. In addition, fewer space demands can potentially result in smaller health facilities, with concurrent reduction in construction materials, energy and water consumption, waste, and overall environmental impact.

Promoting a data revolution

This is the key to ensuring that interventions target the poor and most vulnerable and marginalized communities and regions. Governments need solid baseline data and integrated data sources, and to explore citizen-generated data to supplement national statistics; link evidence-based policy planning to financing the Sustainable Development Goals (SDGs); and use data from the private sector, academia and civil society, particularly where indicators are not available from existing systems.

Generating the means to implement effective participation

We need to identify and foster new ways of working in multi-stakeholder partnership that mobilizes and share knowledge, financial resources, expertise and technology. This includes allocating resources to strengthen capacities and support popular participation in the implementation of and follow-up to the 2030 Agenda at all levels. It also means exploring new financing approaches in collaboration with the private sector to meet the Goal's vast and urgent investment needs.

Efforts of WHEC in the provision of Integrated e-Health Care

Key Initiatives

- Demographic change, rising incidence of chronic disease and unmet needs for more
 personalized care are trends that demand a new, integrated approach to health and social care.
 Professionals must work across sections as a team with common goals and resources to deliver
 a coordinated response to each individual's care requirements. Advanced information and
 communication technology (ICT) provide a major new opportunity to realize care integration,
 superseding today's chain of disjoint responses to discrete threats to health.
- Telehealth, the provision of care at a distance, is a key component in future integrated care.
 Today's segregated telehealth applications still require linking into more comprehensive e-Health strategies, in which clinical pathways and service delivery processes are fully coordinated and data safety shared. An increasingly solid evidence base is emerging indicating that telehealth can be used effectively to respond to the growing call for improved care, in particular for those with chronic conditions. Mainstreaming remains a challenge; market forces alone are likely to remain sufficient.
- Making the case for investment in telehealth applications requires better marshalling of existing
 evidence, not only to show that telehealth works, but also to show where in what organized
 context it will work. Evidence from large-scale pilots and few mainstream implementations
 requires careful synthesis, taking particular account not only of clinical dimensions but also of
 indicators relating to successful deployment in normal care; change management, human
 resources, organizational interfaces, financing requirements, technology integration and ethics
 for everyday practice.
- Financial flows in health systems must be critically assessed for their ability to act as incentives or
 disincentives for telehealth provision, acknowledging that the "business case" for telehealth is
 often very different for different players. Medico-legal and regulatory regimes can also pose
 critical barriers to the exploitation of telehealth. The various regimes should be compared to
 identify best practice and opportunities for regulatory and legislative reform, so as to facilitate
 better integrated care through the use of telehealth.
- The use of telehealth, as a tool to help support better integrated care, can be helped through initiatives that bring policy responsibilities together. This could include setting up financial and organization vehicles (joint budgets, joint ventures) to support partnership across sectors.
- To bring about change, mechanisms should be put in place to foster dialogue, thereby instilling a
 sense of partnership in reform and reducing resistance to change. Process innovation driven by
 clear health policy priorities should precede telehealth design technology on its own cannot be
 expected to deliver. Change management must fully engage all involved participants. Full
 attention to ethical issues should be mandatory and the usability and interoperability of today's
 ICT systems can, and should be, much improved.

Pay full attention to ethics. Pursue a multidimensional approach towards change management. Improve the usability and interoperability of technology.

Join the initiative!

We welcome everyone.



In The News

Defense Advanced Research Projects Agency (DARPA)

Creating BREAKTHROUGH TECHNOLOGIES AND CAPABILITIES



There are number of ways which the general public can contribute to DARPA's mission. One way is by participating the prize challenges that DARPA periodically launches.

There is a long history of using prizes to spur acceleration in technical fields. Indeed, from the 1714 Longitude Prize that led to the development of the world's first practical method to determine a ship's longitude ... to the Orteig Prize that inspired Charles Lindbergh to fly nonstop from New York to

Paris ... to the 2011 Oil Cleanup X Challenge that resulted in the invention of a new and better way to skim oil from the ocean's surface prizes have a long record of spurring innovation.

Another way for members of the public to participate in DARPA programs is by responding to a DARPA Broad Agency Announcement (BAA). DARPA often publicizes its research efforts through the BAA process, which includes a public announcement of a technical goal and an invitation for proposals. BAA are issued, and any resultant selections are made, using procedures under Federal Acquisition Regulation (FAR) 35.016, and any negotiations and/or awards are processed using procedures under FAR 15.4, Contract Pricing, as specified in the BAA.

Proposals received as a result of BAAs are evaluated in accordance with specified evaluation criteria through a scientific review process. Which some BAAs may be posted on the DARPA website for convenience, all DARPA BAAs are posted on the Federal Business Opportunities website, which is the official place to watch for funding opportunities for DARPA.

The preferred method for submitting ideas and concepts to DARPA, in lieu of unsolicited proposals, is to respond to an open solicitation. If an unsolicited proposal is submitted to DARPA it must adhere to the policies and procedures concerning the submission, receipt, evaluation and acceptance or rejection of unsolicited proposals set forth in FAR 15.6.

Follow us, friend us, and join the global conversation about your work!

DARPA is sponsoring and Academic Research Roundtable event with the broader potential performer community in higher education for the purpose of engaging its members in a dialogue on technology and research opportunities. The event will include discussion of the Agency's vision and goals, overviews of each of DARPA's technical offices by office leadership, and an explanation of the mechanics of working with DARPA.

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https://www.fbo.gov/



Me! Come!

Me! Come! My dazzled face In such a shining place!

Me! Hear! My foreign ear The sounds of welcome near!

The saints shall meet Our bashful feet.

My holiday shall be That they remember me;

My paradise, the fame That they pronounce my name.

• Emily E. Dickinson (10 December 1830 – 15 May 1886); an American poet.

Monthly newsletter of WHEC designed to keep you informed on The latest UN and NGO activity

http://www.WomensHealthSection.com