Background

More than 37 million people live in the world as refugees and internally displaced persons (IDPs), uprooted from their homes by conflict and persecution. While 11.4 million live as refugees and asylum seekers, more than twice that number—26 million—are internally displaced. An additional 25 million people have been displaced due to natural disasters. Forced displacement from homes, exposure to violence and poverty, and separation from families and communities cause refugees and IDPs to confront extraordinary difficulties that affect their reproductive health (RH). They often lack sufficient protection and access to health care, education, livelihoods and community support. Furthermore, rape is often widespread and displaced populations, particularly women and girls, may be subjected to sexual abuse and exploitation. Such dangers further increase the risks of unwanted pregnancy, unsafe abortion, and sexually transmitted infections, which can be mitigated or prevented by RH technologies.

In 1994, the Women’s Commission for Refugee Women and Children (Women’s Commission) published a seminal report, *Refugee Women and Reproductive Health Care: Reassessing Priorities*, which documented the lack of RH for refugees and IDPs. The 1994 International Conference on Population and Development recognized the special RH needs of displaced populations, including both refugees and IDPs. Following the Cairo Conference, the Inter-Agency Working Group (IAWG) on Reproductive Health in Refugee Settings was formed for the purpose of promoting access to quality RH care for refugee women and others affected by armed conflict. The IAWG was originally comprised of over 30 organizations, including UN agencies, universities, and governmental and nongovernmental organizations, and was led by the United Nations High Commissioner for Refugees (UNHCR), the World Health Organization (WHO) and the United Nations Population Fund (UNFPA). IAWG now has more than 130 member organizations.

Although much progress has been achieved since 1994, gaps in the provision of RH in emergency settings still exist. The Women’s Commission, PATH and the International Medical Corp (IMC) recognized that some of these gaps could be addressed through technology solutions. The New Technologies for Crisis Settings Working Group (New Technologies Working Group) was established to foster dialogue between experts in the fields of RH, emergency health response, and technology development in order to increase access to appropriate new and underutilized RH technologies in crisis settings. The Women’s Commission and PATH co-hosted a consultation on new and emerging RH technologies in Seattle on May 13-14, 2008. The meeting fostered dialogue between 32 experts representing 16 agencies involved in the fields of RH, emergency health response and technology development. For more information on the Consultation agenda, presentations and meeting minutes, visit: http://www.iawg.net/technologies/index.html.

Consultation objectives

The purpose of the Consultation was to foster dialogue among experts in the fields of RH, emergency health response, and technology development and introduction in order to increase access to appropriate new and underutilized RH technologies in crisis settings.

1. Identify gaps and challenges in RH service delivery for populations in crisis settings.
2. Identify and prioritize new or underutilized RH technology solutions to improve RH and service delivery in crisis settings.
3. Articulate processes for developing, adapting, piloting, and introducing RH technologies for appropriate use in crisis settings.
4. Discuss procedural issues involved in making RH technologies available for program use.
5. Develop an action plan for next steps by the New Technologies Working Group.
Summary of needs/gaps analysis

Participants identified a broad range of RH needs and service delivery challenges under the five topical areas defined by the "Reproductive Health in Refugee Situations: An Inter-agency Field Manual" (first published in 1997, revised 1999): Maternal and Newborn Health; Family Planning; Sexually Transmitted Infections, including HIV; Sexual and Gender-based Violence; and Other RH Concerns. New Technologies Working Group members prioritized the following needs for action: 1) addressing the needs of sexual assault survivors outside established camp settings; 2) providing access to safe abortion; 3) developing clear job aids to help aid workers better utilize the drugs and technologies available in RH Kits that are shipped to agencies in emergencies; 4) expanding the range of methods to prevent and treat postpartum hemorrhage; and 5) increasing awareness and communication within relief settings about services that are available. Subcommittees brainstormed ways to address each of these needs.

Criteria for setting priorities of the Working Group

The New Technologies Working Group identified the following key issues to consider when choosing among priorities:

1. Magnitude of the problem (such as morbidity and mortality, size of affected population, level of risk, how the population is distributed)
2. Gaps enhanced by the crisis if the problem is not addressed
3. Existence of a potential sustainable solution
4. Whether the technology can address cross-cutting gaps for RH and non-RH issues
5. Extent to which the potential solution can empower users
6. Whether the technology addresses issues of marginalized/ignored populations
7. Political/religious/cultural considerations that need to be taken into account when piloting, introducing or rolling out the technology

Participants also defined characteristics of technologies that are appropriate for crisis settings, including:

1. Cost-effectiveness and extent to which the technology addresses a significant health need
2. Simplicity (few pieces, low maintenance, easy adoption and adherence)
3. Durability, shelf life, storage security
4. Ability to facilitate monitoring and evaluation and other data collection efforts
5. Point of care and facility independence (not dependent on electricity, water, etc.)
6. Level of evidence/validation
7. Versatility/adaptability, useful for many applications
8. Amount of wastage generated
9. Risk of failure/safety, including misuse and non-use
10. Ease of distribution (compact configuration)
11. Potential for local procurement or production (supplementary and long-term, such as birth kits)
12. Possibility for simplified license expansions and patent facilitation
13. Quality control processes/assurances

Technology solutions

Participants brainstormed underutilized technologies currently available in RH kits and possible additional technologies to make available through kits or other supply mechanisms. These suggestions were plotted on PATH’s Technology Introduction Continuum, and voted upon for prioritization. The outcomes are shown in the box on page 3.

Although the Consultation participants collectively brought extensive field experience from crisis settings, it was recognized that additional insights on critical challenges could be identified by engaging staff currently working in crisis situations. Two ways of
involving field staff in Working Group deliberations were identified: 1) solicit information from field staff opportunistically when conducting field visits through assessment tools and designated agency focal points, and 2) support field representation at future New Technology Working Group meetings and on conference calls.

**Technology Introduction Continuum**

**A** Design
- New antibiotics for sexually transmitted infections, such as gonorrhea

**B** Test
- Non-pneumatic anti-shock garment
- New formulation, delivery pump for Magnesium sulfate

**C** Refine/Produce
- Gentamicin (drug to treat bacterial infections) in Uniject, an injection device. Two doses for the treatment of neonatal sepsis

**D** Produce
- Oxytocin (drug to manage labor) in Uniject
- Bed nets for Intermittent Preventive Treatment (IPT) of malaria

**E** Incorporate into kits or make available through other supply mechanisms
- Misoprostol (drug) for postpartum hemorrhage and post-abortion care
- Neonatal kits with cloth/blankets
- Rapid diagnostic tests for gonorrhea, syphilis, HIV
- Hand-carried portable ultra-sound for hospitals and health centers
- Contraceptive Implants
- Bag and Mask for neonatal resuscitation—now in Kit 11, but add to Kit 6

**F** Increase Use
- Magnesium Sulfate for eclampsia
- Condoms, female condoms
- Emergency contraception
- Reusable Kiwi Omni-Cup for vacuum extraction
- Manual Vacuum Aspiration (MVA) equipment for post-abortion care and safe abortion care
- Post-Exposure Prophylaxis for HIV prevention
Role of kits and United Nations agencies in making technologies available

One channel for distribution of RH technologies to crisis settings is by incorporating them into kits that are shipped to implementing agencies that respond to the early days and weeks of a crisis. Not all organizations use these standardized kits and they are not appropriate as a sustainable source for resupply; however, they are one entry point for introduction of a new technology. In order to be included in the Interagency Emergency Health Kit (IEHK) or the IAWG Interagency RH Kit, items must first be listed on the Essential Medicine List (EML), which is managed by WHO.

The IEHK content is based on standard WHO treatment guidelines and updated approximately every four years. The IEHK Review Committee, hosted by WHO as a secretariat, verifies whether the content is in line with the WHO Model List of Essential Medicines. If additions or deletions to the WHO EML are called for, there is an October 2008 deadline for submitting recommendations for consideration at the March 2009 EML Committee Meeting. Prequalification is also a key aspect of the quality assurance process for the procurement of pharmaceutical drugs.

Medical devices are not included in the medicines list because they are regulated in a different way; the methods and models used for the evidence-based selection of essential medicines cannot be applied to medical devices. A WHO publication on essential RH medical devices and consumables is due to be published in 2008. This document is advisory by nature and is intended to highlight what might be needed when implementing existing RH treatment guidelines.

The content of the Interagency RH Kit is reviewed biannually through a survey that targets consignees and other implementing partners. The survey solicits information regarding the implementation of the Minimum Initial Services Package (MISP) for RH, logistics, guidelines and training, and kit content. Background papers on new technologies are also reviewed, including technologies successfully piloted by partners and those supported by WHO. UNFPA Procurement assembles kits and makes them available for order. Since 2005, the Interagency RH Kit update process has been consistent with that of the IEHK. Challenges to incorporating new medicines and devices include the time-consuming process for new medicines to be added to the EML, the lack of an “Essential Reproductive Health Devices” list, and regulatory issues such as quality and specifications. The kits are designed for emergency needs; due to planning logistics and the high costs of kits, a timely, sensible and sustainable “post-kit” supply mechanism is needed.
Outstanding questions for the New Technologies Working Group

A few issues require additional consideration as the Working Group moves forward. Firstly, it is essential that the Working Group engages in these discussions directly with field staff and vulnerable populations in crisis settings. Secondly, the group needs to be conscientious about using rigorous user evaluation and operations research to confirm whether a particular technology meets the needs on the ground and improves the RH of displaced persons. Lastly, the group needs to identify or develop research guidelines to assure that vulnerable populations and humanitarian workers are not harmed or further encumbered by research and evaluation efforts.

Future directions for the New Technologies Working Group of the IAWG

The New Technologies Working Group is chaired by International Medical Corps, PATH, UNFPA and Venture Strategies. Membership in the New Technologies Working Group and sub-working working groups is open and encouraged.

How to get involved

To find out more about the New Technologies Working Group, see http://www.iawg.net/technologies/index.html. To become involved, please register at http://my.ibpinitiative.org/iawg/newtech/, noting your interest in participating in the activities of the working group.
Notes

1 A refugee is a person who, owing to a well-founded fear, has fled across an international border. Internally displaced persons (IDP) are people who have had to flee their homes and seek refuge in a “safer” part of their own country. Displacement can be a result of both conflict and natural disasters.
3 Ibid.
4 The name was later changed to Inter-agency Working Group on Reproductive Health in Crises to better reflect the group’s purpose in addressing the RH needs of all crisis-affected populations.
5 The Women’s Commission for Refugee Women and Children is an advocacy organization that works in collaboration with others to affect systemic improvements in humanitarian response, particularly for women and girls. www.womenscommission.org
6 PATH is a development agency that creates sustainable, culturally relevant solutions for global health. www.path.org
7 The International Medical Corps is an international humanitarian organization that provides health care services and training for relief and development programs. www.imcworldwide.org

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Attending Organizations

Global Health Access Program
Gynuity Health Projects
International Medical Corps
International Planned Parenthood Foundation
International Rescue Committee
Jhpiego
Johns Hopkins School of Public Health
Marie Stopes International
PATH
Sustainable Health Enterprises
UCSF, Women’s Global Health Imperative
UNICEF
UNFPA
Venture Strategies for Health and Development
WHO
Women’s Commission for Refugee Women and Children

This report was produced on behalf of the New Technologies Working Group of the IAWG by:

PATH
1455 NW Leary Way
Seattle, WA 98107 USA
1.206.285.3500
info@path.org
path.org

Women’s Commission for Refugee Women and Children
122 East 42nd Street
New York, NY 10168-1289
1.212.551.3115
info@womenscommission.org
womenscommission.org

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