



**An Evaluation of Reproductive Health Service
Provision in Masisi Health Zone, North Kivu Province,
Democratic Republic of Congo**

October 9-26, 2013

Inter-agency Working Group on Reproductive Health in Crises

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This report was written by Josep Vargas, Sarah Chynoweth, and Gururoop Wazir for the 2012-2014 IAWG Global Review on Reproductive Health in Crises. It was reviewed by Nadine Cornier of UNHCR and Sara Casey of Columbia University, with special thanks to Léa Steinacker of Harvard University for her assistance.

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Contact:

Inter-agency Working Group on Reproductive Health in Crises (IAWG) at info@iawg.net.

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List of Acronyms

ANC	Antenatal care
ARI	Acute respiratory infection
ARV	Antiretroviral
ART	Antiretroviral therapy
ASRAMES	Regional Association for the Supply of Essential Drug
BEmONC	Basic emergency obstetric and newborn care
CAC	Comprehensive abortion care
CCCM	Camp Coordination and Camp Management
CEmONC	Comprehensive emergency obstetric and newborn care
CIDA	Canadian International Development Agency
CMoR	Clinical management of rape
DfID	Department for International Development-UK
DRC	Democratic Republic of the Congo
EC	Emergency contraception
ECHO	European Community Humanitarian Aid Office
EmONC	Emergency obstetric and newborn care
FGD	Focus group discussion
FP	Family planning
GBV	Gender-based violence
GRH	General referral hospital
HIV	Human Immunodeficiency Virus
IAFM	Inter-agency Field Manual
IAWG	Inter-agency Working Group on Reproductive Health in Crises
ICPD	International Conference on Population and Development
IDP	Internally displaced person
IMF	International Monetary Fund
IRC	International Rescue Committee
IUD	Intrauterine device
M23	<i>Mouvement du 23 mars</i> March 23 Movement
MICS	Multiple Indicator Cluster Survey
MISP	Minimum Initial Service Package
MMR	Maternal mortality rate
MoH	Ministry of Health
MSF-B	Médecins Sans Frontières/Doctors Without Borders-Belgium
NGO	Nongovernmental organization
OCHA	Office for the Coordination of Humanitarian Affairs
OCP	Oral contraceptive pill
RH	Reproductive health
RHC	Referral health center
RHWG	Reproductive Health Working Group
PAC	Post-abortion care
PCA	<i>Paquet Complémentaire d'Activités</i> (Complementary Package of Activities)

PEP	Post-exposure prophylaxis
PHC	Primary health center
PI	Primary Investigator
PLHIV	Person(s) living with HIV
PMA	<i>Paquet Minimum d'Activités</i> (Minimum Package of Activities)
PMTCT	Prevention of mother-to-child transmission (of HIV)
PNC	Postnatal care
PNDS	<i>Programme National de la Santé de l'Adolescent</i> (National Programme on Adolescent Health)
PNSR	<i>Programme National de la Santé de la Reproduction</i> (National Reproductive Health Programme)
SCI	Save the Children International
STI	Sexually transmitted infection
SV	Sexual violence
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization
VCT	Voluntary counseling and testing (for HIV)

Executive Summary

Introduction

Since the mid-1990s, the Democratic Republic of the Congo (DRC) has been afflicted by conflict; violence and displacement continue in the Eastern regions. By mid-2013, approximately 2.7 million people were internally displaced, including more than one million in North Kivu Province.¹ Host and displaced communities in North Kivu have suffered serious consequences to their reproductive health (RH) due to high needs as well as variable access to and availability of services. This report documents the main findings of an assessment of RH services in Masisi Health Zone, North Kivu Province, DRC.

Purpose

As part of the 2012-2014 Global Review on RH in Crises, the Inter-Agency Working Group on Reproductive Health in Crises (IAWG) has undertaken assessments in three humanitarian settings to document the availability, quality, and utilization of comprehensive RH services available for conflict-affected communities. This report describes one component of the three-country study: a mixed methods assessment of RH services in Masisi Health Zone, North Kivu Province, DRC. The purpose of this study is to inform policy and programming to meet the RH needs of the conflict-affected communities.

Methods

The study team used a mixed-methods approach involving both quantitative and qualitative techniques including health facility assessments, provider questionnaires, focus group discussions, and key informant interviews. From October 9 to 26, 2013, 26 health facilities in North Kivu's Masisi Health Zone were assessed. All accessible health facilities (health center and above) providing RH services were evaluated. One large referral hospital and 25 health centers were assessed. A total of 14 focus group discussions were held with 114 internally displaced people and 19 members of the local community in Masisi Town to assess knowledge of and attitudes towards RH and identify barriers to accessing RH services. Key informant interviews were held with 17 representatives from the Ministry of Health, UN agencies, and international and national non-governmental organizations (NGOs) to examine the integration of RH into the

¹ OCHA. Factsheet, Democratic Republic of the Congo: Internally displaced people and returnees. December 2013. http://reliefweb.int/sites/reliefweb.int/files/resources/RDC%20Factsheet_Mouvement%20de%20population_english_Dec2013.pdf.

humanitarian health response. Questionnaires were completed by 13 providers to assess knowledge of and attitudes towards RH service provision.

Key findings

- A Reproductive Health Working Group, lead by UNFPA, is functioning well under the Health Cluster.
- The Masisi General Referral Hospital provided a broad range of RH services including key elements of clinical care for rape survivors, services for HIV and other sexually transmitted infections (STIs), and qualifies as a functioning post-abortion care (PAC) and family planning service delivery point. It provided almost all essential components of comprehensive emergency obstetric and newborn care (EmONC); at the time of the assessment, however, it lacked adequate supplies for safe blood transfusion.
- Services for safe abortion, EmONC, newborn care, and prevention of mother-to-child transmission (PMTCT) of HIV were not adequately available at any health centers assessed.
- Availability of adequate PAC, family planning services (particularly long-acting methods and emergency contraception), and clinical management of rape (CMoR) among health centers was low.
- The hospital and one health provided ART for adults, yet treatment for children with HIV was not available any health facility.
- Gaps in RH care resulted from poor commodity security and management as well as lack of skilled staff and policy barriers.
- Many focus group participants were unaware of available RH services in the area. Further, focus group discussions revealed that, even when informants knew where and why to access services, significant socio-cultural barriers undermined health-seeking behavior.
- Adolescents, particularly unmarried girls, had low knowledge of RH and encountered a variety of impediments to accessing care.

Key recommendations

Health and RH actors should:

- Engage and educate affected communities about RH and RH service availability to increase access and use of services. Ensure efforts are locally contextualized, evidence-informed, and grounded in a rights-based approach.
- Conduct comprehensive logistical audits and establish or strengthen contingency stocks of RH supplies.
- Strengthen staff capacity through competency-based training and refresher courses on RH and provide consistent coaching. Integrate non-technical skills such as situation awareness, critical decision-making, effective communication, and teamwork into training and capacity building efforts. Ensure negative provider attitudes (towards abortion and family planning, for example) are addressed.
- Develop and implement a comprehensive strategy (beyond facility-based health service provision) to facilitate adolescents' access good quality services.
- Scale up basic EmONC, including newborn care, and PMTCT among health centers and ensure availability of safe blood transfusion at referral hospital.
- Explore alternative transportation options for pregnant women to access health facilities 24 hours a day, seven days a week.
- Ensure quality post-rape treatment is available at all health centers at all times. Address gaps in provider knowledge and ensure staff are trained in compassionate care.
- Expand family planning services, particularly long-acting methods and emergency contraception. Develop culturally sensitive community outreach strategy to dispel myths and educate communities about the benefits of family planning.
- Increase condom distribution points.
- Expand HIV treatment points, including at least one treatment point for children.
- Explore using nutrition as an entry point to link malnutrition support with HIV interventions and family planning services.
- Prioritize safe abortion. Address barriers to provision of induced abortion and ensure comprehensive abortion care is available to the extent of the law.
- In addition, funding is urgently needed to support NGO and MoH efforts to ensure the RH needs of the communities are met.

See section 7 for further recommendations.

1. Introduction

Since its formation in 1995, the Inter-Agency Working Group (IAWG) on Reproductive Health in Crises has worked to address reproductive health (RH) needs of communities displaced by conflict and natural disasters. IAWG is comprised of 1,500 members from 450 agencies, including UN agencies, governmental agencies, international and national NGOs, universities, and donors.² From 2002 to 2004, IAWG undertook a global evaluation on the state of RH service provision in humanitarian emergencies. Now, ten years later, IAWG has conducted a second global review in an effort to document progress and gaps as well as identify ways to improve RH care for communities affected by crises.

This assessment evaluated the availability, quality, and utilization of comprehensive RH service provision in health facilities within the Masisi Health Zone of North Kivu Province, Democratic Republic of the Congo (DRC). Reproductive health components assessed included provision of family planning (FP) services, emergency obstetric and newborn care (EmONC), comprehensive abortion care, services for HIV and other sexually transmitted infections (STIs), as well as clinical management of rape (CMoR). In addition, the study identified key barriers to service delivery and utilization. This report documents these findings and offers recommendations to help inform RH planning and implementation to meet the health needs of the conflict-affected communities.

2. Background

2.1 Overview of the Democratic Republic of the Congo (DRC)

In 2012 the population of the DRC was estimated at 65.7 million.³ Despite immense natural and mineral resources, it is one of the poorest countries in the world with some of the worst indicators in sub-Saharan Africa. On a scale of one to 187, DRC tied for last place with Niger on the 2013 Human Development Index. It also ranked 144 out of 148 countries in the 2012 Gender Inequality Index.⁴ Approximately three out of every five people survive on less than USD 1.25 day,⁵ and only 26% have access to safe drinking water, far below the 60% average for sub-Saharan Africa.⁶ The 2013 State of World's

² Inter-Agency Working Group on Reproductive Health in Crisis. About IAWG (2013). <http://iawg.net/about-iawg/>.

³ World Bank, 2012. <http://www.worldbank.org/en/country/drc>.

⁴ UNDP. *Human Development Report 2013: Congo (Democratic Republic of the)*. 2013.

<http://hdr.undp.org/sites/default/files/Country-Profiles/COD.pdf>.

⁵ World Bank, PovCalNet, 2009. <http://iresearch.worldbank.org/PovcalNet/povcalSvy.html>.

⁶ United Nations Environment Programme, *Water Issues in the Democratic Republic of the Congo: Challenges and Opportunities*, 2011.

Mothers Report named DRC as the worst place to be a mother⁷ with a high maternal mortality ratio of 540 maternal deaths per 100,000 live births.⁸

During the past two decades, the DRC experienced two major wars, known as the Congo Wars. The First Congo War, from 1996 to 1997, was precipitated by the destabilization of the two Kivu provinces, North and South, in the eastern part of the country fueled by the massive influx of refugees following to the 1994 Rwandan genocide. The second war, fought between 1998 and 2003, was largely a continuation of the first and ultimately involved nine countries.

Despite general elections in 2006, which brought President Joseph Kabila to power, the humanitarian situation in the eastern provinces has remained volatile. Since the beginning of the conflict, more than two dozen armed groups have formed in the region and localized conflict continues to erupt, particularly in North Kivu. The conflict has generated a complex humanitarian crisis characterized by insecurity, widespread human rights violations, destruction of infrastructure, and population displacement. Security concerns with regards to the Rwandan border and the control of minerals in the region have prolonged the conflict.⁹

2.2 Health sector

2.2.1 Healthcare structure

The healthcare system is organized into Health Zones as the operational unit of primary health care planning and implementation. Each Health Zone contains at least one general referral hospital and one or more referral health centers. (A referral health centers offers all of the services of a regular health center plus selected tertiary services.) Each Health Zone is further divided into geographical and administrative Health Areas, which have at least one health center in addition to some health posts.

⁷ Save the Children. *State of the World's Mother's Report*. May 2013. http://www.savethechildren.org/atf/cf/%7B9def2ebe-10ae-432c-9bd0-df91d2eba74a%7D/SOWM-FULL-REPORT_2013.PDF.

⁸ UNFPA. *State of the World Population 2013: Motherhood in Childhood: Facing the Challenge of Adolescent Pregnancy*. 2013. <http://www.unfpa.org/webdav/site/global/shared/swp2013/EN-SWOP2013-final.pdf>.

⁹ Stearns, Jason. *North Kivu: The Background to Conflict in North Kivu Province of Eastern Congo*. Rift Valley Institute/Usalama Project. 2012. http://riftvalley.net/publication/north-kivu#.U5cuW_ldUvk.

National estimates indicate that 71% of the population is within 30 minutes from a health center.¹⁰

Health centers are mandated to provide a “Minimum Package of Activities” (*Paquet Minimum d'Activités* or PMA). The PMA encompasses components of primary health care such as curative activities, including diagnosis and treatment of normal diseases, normal deliveries and basic emergency obstetric and newborn care (BEmONC), testing and treatment of chronic diseases; nutritional rehabilitation, and minor surgery; preventive activities, including monitoring the growth and development of children under 5 years, prenatal consultations, FP, postnatal consultations, and promotional activities such as the promotion of condoms, exclusive breastfeeding, healthy eating habits, promotion of sanitary latrines, and oral rehydration therapy.¹¹

In addition to the PMA, hospitals and to some extent the referral health centers are expected to provide a “Complementary Package of Activities” (*Paquet Complémentaire d'Activités* or PCA) to support the health centers in the provision of quality PMA. The PCA is a set of activities that supplements PMA, which includes curative and preventive promotional activities organized as part of internal medicine, surgery, gynecology, obstetrics, and pediatrics. The role of the referral level is to ensure continuity of care for patients who require care not available at the health center.

2.2.2 Human resources

The DRC has an estimated 0.11 physicians and 0.53 nurses and midwives per 1,000 people.¹² There is an estimated workforce shortage of almost 4,000 providers to attain 95% skilled birth attendance by 2015.¹³ The distribution of health professionals by province shows that rural areas are disadvantaged, especially with respect to doctors, pharmacists, and dental surgeons, the vast majority of whom are in Kinshasa.¹⁴

¹⁰ UNDP. *Province du Nord Kivu – Profil Résumé – Pauvreté et conditions de vie des ménages*; PNUD. March 2009. http://www.cd.undp.org/content/dam/dem_rep_congo/docs/povred/UNDP-CD-Profil-PROVINCE-Nord-Kivu.pdf.

¹¹ Democratic Republic of Congo Ministry of Health. *Recueil des Normes d'Organisation et de Fonctionnement de la Zone de Santé*. Septembre 2009.

¹² World Bank. 2010. *World Development Indicators*. Washington DC.

¹³ UNFPA. *State of the World's Midwifery*. 2011.

http://www.unfpa.org/sowmy/resources/docs/country_info/profile/en_DRC_SoWMy_Profile.pdf.

¹⁴ African Development Fund. *Social Development Department-Central and West Regions. Appraisal Report: The Health Project I-Eastern Province Healthcare Development Master Plan Support: Democratic Republic of Congo*. December 2003. <http://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/CD-2004-011-EN-ADF-BD-WP-DRC-AR-HEALTH-I.PDF>.

Health facilities are equipped with the following staff: a health post is staffed with a nurse and a trained community agent; the health center has two to three nurses, an auxiliary, a hygienist, a guard, and a receptionist; the referral health center has a medical generalist and a number of nurses, nurse-midwives, auxiliaries, and other staff (such as a laboratory technician, pharmacist, guards, hygienists, among others.) More specialized and experienced providers are available at general referral referral hospitals.

2.2.3 Health financing

Between 2000 and 2009, an average of 4% of the State budget was allocated to health. Health expenditure per capita in 2008/2009 was USD 13 per person. However, according to the MoH, USD 20 is required to ensure the recommended services are operational at the Health Zone level.¹⁵

Some health facilities, particularly in the eastern provinces, are supported by international partners, such as NGOs or the UN, and are thus able to provide many services for free. Among unsupported facilities, clients must pay for care. Indeed, the population is the primary funder of the national health system, with cash contributions representing approximately 70% of the operating cost of the health facilities.¹⁶ Household expenditure for healthcare takes the form of direct payments to service providers. Research indicates that households pay around USD 7 per person per year for healthcare.¹⁷ The cost of care has led to a drastic reduction in health service utilization rates from 0.60 consultations per year per inhabitant in the 1980s to an average of 0.15 between 1990 and 2010.¹⁸

Faith-based networks, primarily Protestant and Catholic, operate 40% to 50% of public health facilities. The churches manage many government-owned facilities on behalf of the Ministry of Health (MoH). The Catholic Church estimates it is operational in approximately half of all Health Zones, supporting 27% of facilities fully and 63% partially. The faith-based networks have agreements with the MoH mandating them to

¹⁵ Democratic Republic of the Congo Ministry of Health. *Costing et Planification de Ressources des Services de Santé dans le Cadre de la Mise en œuvre de la Stratégie de Renforcement du Système de Santé*. August 2008.

¹⁶ Democratic Republic of the Congo Ministry of Health. *Health System Strengthening Strategy*. 2006. http://www.minisanterdc.cd/Articles/srss/srss_rdc_web_en.pdf.

¹⁷ Zinnen, Veronique. *La Mise en œuvre de l'Agenda pour l'Efficacité de l'Aide dans le Secteur de la Santé en République Démocratique du Congo - Rapport d'Etat des Lieux en Vue de la Sélection d'Etudes de Cas*. Institut de Recherche Santé et Société, Université Catholique de Louvain. February 2012. http://www.grap-pa.be/attachments/article/69/201202_capitalisationdp_rdc3.pdf.

¹⁸ Ibid.

manage hospitals and health centers in accordance with national health system guidelines.¹⁹

2.3 Reproductive health

As outlined in Table 1, the DRC has extremely poor RH indicators. As noted previously, maternal mortality ratios are among the highest in the world.²⁰ With one in seven children dying before reaching the age of five,²¹ the DRC is among the top five countries globally with the highest child mortality rates.²²

Table 1. Key health indicators²³	
Indicators	2010
Maternal mortality ratio (per 100,000 live births) ²⁴	540
Deliveries attended by skilled personnel	74%
Contraceptive prevalence (using a modern method)	5.7%
Unmet need for contraception	24%
Antenatal care (at least 4 visits)	44%
Total fertility rate	6.3
Adolescent fertility rate (births per 1,000 women age 15-19)	135
Early childbearing (women aged 20-24 with a least one live birth before 18)	25%
Under-five mortality rate (per 1,000)	158
Infant mortality rate (per 1,000)	97
HIV prevalence ²⁵	1.1%
Young sexually active women (age 15-24) who had been tested for HIV and knew their status	15%

The government of DRC has developed a number of policies regarding RH. The *Politique Nationale de Santé de la Reproduction*, or the National Policy on RH (2008),

¹⁹ United Kingdom Department for International Development (DFID). *Access to Health Care in the Democratic Republic of Congo - Business Case and Intervention Summary*. NB: the document concerns a five-year programme to be implemented from early 2013 to March 2018.

²⁰ UNFPA. *State of the World Population 2013: Motherhood in Childhood: Facing the Challenge of Adolescent Pregnancy*. 2013. <http://www.unfpa.org/webdav/site/global/shared/swp2013/EN-SWOP2013-final.pdf>.

²¹ UNICEF. Democratic Republic of Congo. http://www.unicef.org/wcaro/Countries_1749.html

²² Black Robert E, et al. "Global, Regional, and National Causes of Child Mortality in 2008: a Systematic Analysis". *The Lancet*. 375, no. 9730. June 5, 2010.

²³ Unless otherwise noted, all data are from: Democratic Republic of the Congo, National Institute of Statistics/ UNICEF, *Enquête par Grappes à Indicateurs Multiples en République Démocratique du Congo: 2010 Synthesis Report*, May 2011.

²⁴ UNFPA. *State of the World Population 2013: Motherhood in Childhood: Facing the Challenge of Adolescent Pregnancy*. 2013. <http://www.unfpa.org/webdav/site/global/shared/swp2013/EN-SWOP2013-final.pdf>.

²⁵ UNAIDS. *Democratic Republic of the Congo, HIV and AIDS Estimates*. 2012. <http://www.unaids.org/en/regionscountries/countries/democraticrepublicofthecongo/>.

provides the national framework for the promotion and implementation of RH programs and the delivery of services at different levels (central, provincial, and periphery).²⁶ The MoH implements the RH policy through the *Programme National de la Santé de la Reproduction* (PNSR - National Reproductive Health Programme.) The PNSR is the coordinating body for advocacy and the implementation of RH services at the provincial level. The PNSR aims to play a strategic role in establishing standards for RH, coordinating, supervising and evaluating RH activities, and engaging in resource mobilization. Operational planning and implementation fall under the responsibility of the Health Zone.

Additional national policies and programs include:

- *Plan Stratégique de la Lutte contre le VIH et le SIDA du Secteur de la Santé 2010 – 2014* (MoH). The National Strategic Plan to Fight against AIDS aims to be a reference tool for all interventions against HIV and AIDS, in accordance with the principles of ownership, alignment, harmonization, managing for results, and mutual accountability.
- *Programme National de la Santé de l'Adolescent* (PNSA). The National Program for Adolescent Health is a specialized program of the MoH created by ministerial decree in March 2003 with the mission to promote the health and development of adolescents in the country. The program aims to (1) develop guidelines, (2) integrate adolescent health at the National Health System, (3) establish the diagnosis system in the areas of control and management of health problems adolescent, (4) ensure the development of research, and (5) coordinate interventions to improve adolescent health.

Regarding RH financing, in 2008 the total cost of RH services was approximately USD 132 million, or an estimated US\$8.37 per woman of childbearing age.²⁷ The main sources of funding for RH are users (68%) and international support (32%), including donors and international NGOs. The central and provincial government contributions account for only 0.1% of the total. International donors finance most of the supply of contraceptives.²⁸

²⁶ Tulane University. *Family Planning in the DRC*. <http://familyplanning-drc.net/political-documents-pertinent-to-family-planning.php>.

²⁷ Tulane University. *Family Planning in the DRC*. <http://planificationfamiliale-rdc.net/financement.php>.

²⁸ Ibid.

2.4 Humanitarian context

2.4.1 North Kivu Province

North Kivu (or *Nord Kivu*) Province lies in eastern DRC and borders Uganda and Rwanda. Goma is its administrative capital and it contains six territories including Masisi, the setting for this assessment. With a population of around 5.8 million²⁹ and a poverty incidence rate of 72.9% (compared to 71.3% for DRC overall), North Kivu was one of the five poorest provinces of the country in 2005.³⁰

Map 1: Democratic Republic of Congo



²⁹ Democratic Republic of Congo Ministry of Health. *Plan Provinciale de Développement Sanitaire du Nord Kivu 2011–2015*. February 2010.

http://www.nationalplanningcycles.org/sites/default/files/country_docs/Democratic%20Republic%20of%20Congo/pnds_2011-2015.pdf.

³⁰ UNDP. *Province du Nord Kivu – Profil Résumé – Pauvreté et conditions de vie des ménages*; PNUD. March 2009. http://www.cd.undp.org/content/dam/dem_rep_congo/docs/povred/UNDP-CD-Profil-PROVINCE-Nord-Kivu.pdf.

North Kivu has been the epicenter of war for the past two decades. Armed groups have directly targeted the civilian population and used systematic sexual violence against women and girls in particular, resulting in the displacement of hundreds of thousands of people.³¹ In July 2013, the total number of internally displaced persons (IDPs) in North Kivu Province was estimated around 921,000.³² Approximately 73.2% of the IDPs were accommodated in host families, 18.2% in public and spontaneous sites,³³ and 8.6% in UNHCR-managed camps. Close to 95% of the displacement was due to armed conflict and insecurity while around 5% was due to unknown causes.³⁴ A Camp Coordination and Camp Management Working Group (CCCM WG) coordinated by UNHCR has organized the management of many of these sites (referred to as CCCM camps). IDPs in the camps live in very poor, difficult conditions and, due to insecurity, are often unable to move freely outside of the camps.

Health coverage is inadequate: the province has 47 hospitals for the entire province, 12 beds per 100,000 people, and one medical doctor per 24,030 people, which is far below the WHO standard of one doctor per 10,000 people.³⁵ Further, the MoH does not have the financial resources/budget to ensure a consistent supply of medicines to the public health facilities. As such, a nonprofit organization, ASRAMES (Regional Association for the Supply of Essential Drugs), was established in 1993 to support the purchasing and supply system for medicines and medical supplies in North Kivu. The public health facilities that do not benefit from external support (UN or NGO) buy the products they need through ASRAMES, which has most but not the entire range of necessary products. The provincial government also encourages the international NGOs and UN agencies to purchase from ASRAMES.³⁶ Most of the international partners have their own purchasing and distribution mechanisms.³⁷

³¹ Stearns, Jason. *North Kivu: The Background to Conflict in North Kivu Province of Eastern Congo*. Rift Valley Institute/Usalama Project. 2012. http://riftvalley.net/publication/north-kivu#.U5cuW_ldUvk.

³² OCHA. *Mid-Year Review of the Humanitarian Action Plan*. July 2013.

³³ “A self-settled camp/site or collective center such as the grounds of a church, school or administrative building, an open field, an open area within a community or within a building such as a church or school, in which displaced persons or families will live. These can range in size from several families to thousands of persons. Spontaneous camps receive intermittent humanitarian aid”. ‘Internal Displacement in North Kivu: Hosting, Camps, and Coping Mechanisms’; Steve McDowell, Assessment Team Leader; Prepared for UNICEF DRC and CARE DRC; 27 April 2008.

³⁴ OCHA. Nord-Kivu: Situation des Personnes Déplacées Internes (PDI) au 25 Mars 2013. April 10, 2013.

³⁵ UNDP. *Province du Nord Kivu – Profil Résumé – Pauvreté et conditions de vie des ménages*; PNUD. March 2009. http://www.cd.undp.org/content/dam/dem_rep_congo/docs/povred/UNDP-CD-Profil-PROVINCE-Nord-Kivu.pdf.

³⁶ Association Régionale D'Approvisionnement en Médicaments Essentiels. <http://www.asrames.com/en/>.

³⁷ USAID/ Democratic Republic of Congo Ministry of Health, *Comptes nationaux de la santé 2008 – 2009*. May 2011.

2.4.2 Assessment setting: Masisi Health Zone

The Masisi Health Zone has 29 Health Areas, each with a health center and several health posts. A general referral hospital is located in Masisi Town and there are two referral health centers, namely Nyabiondo northwest of Masisi Town and Nyakariba in the far-east of the Health Zone. The epidemiological profile of the Health Zone suggests a morbidity pattern dominated by malaria, acute respiratory infections, flu, diarrhea, and trauma, while mortality is dominated by severe malaria, malnutrition, diarrhea, acute respiratory infections, and AIDS-related illness.³⁸

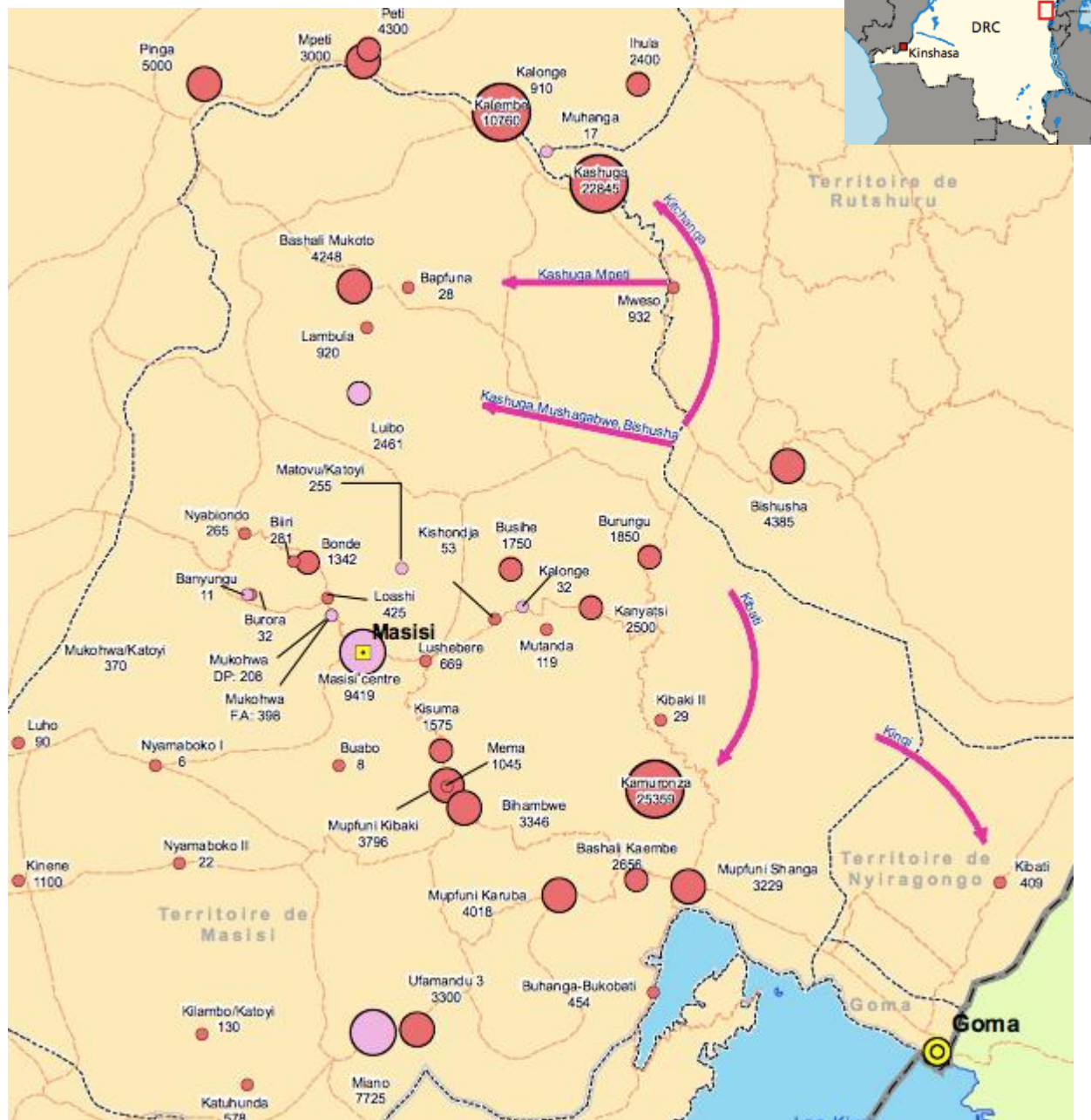
As of September 2013, around 113,000 IDPs were being accommodated in 17 CCCM camps (Table 2).

Table 2. Number of IDPs per camp in Masisi Territory as of 30/09/2013			
Area	Camps	Households	Population
Masisi Center	Kilimani	310	1143
	Lushebere	1188	5077
	Kalinga	2065	9128
	Bihito	1889	8635
	Bukombo	613	2385
	Sub-total	6,065	26,368
Kilolirwe - Kitchanga	Kalengera	710	2721
	Mukoto	874	4613
	Muhanga	980	3882
	Mungote	3797	15542
	Impati	4876	23336
	Mweso	1318	5056
	Nyange	316	1166
	Kivuye	775	3114
	Kahuga1	1440	5069
	Kashuga2	1277	5157
	Ibuga	3797	15542
	Kalembe Remblais	459	1664
	Sub-total	18,056	86,862
	TOTAL		113,230

Source: UNHCR 2013

³⁸ Democratic Republic of Congo Ministry of Health. *Plan d'Action Consolidé de la Province Sanitaire du Nord Kivu*. 2013.

Map 2: Masisi Territory



Source: UNOCHA 2010

3. Objectives

The study's objectives were to:

- assess the availability, quality, and utilization of RH services of conflict-affected communities in Masisi Health Zone

- identify barriers to implementation
- propose recommendations to inform the humanitarian RH response.

4. Methods

4.1 Overview

The assessment took place in the Masisi Health Zone, North Kivu Province in eastern DRC from October 9 to 26, 2013.

Country and site selection

DRC meets four of the five of the selection criteria for inclusion in the IAWG Global Review:

1. Defined as low income by the World Bank classification in 2012;
2. Classified as “Warning” in the Failed States Index;
3. Has experienced conflict from 2010-2012 (Uppsala University Conflict Database);
4. Is defined as being on Stressed, Crisis or Emergency on the Famine Early Warning System;
5. Has experienced a major natural disaster during 2011 or 2012. “Major” is defined as launch of a flash appeal for international assistance.

Quantitative and qualitative assessments

This cross-section, mixed methods study was comprised of two components:

1. A quantitative approach that included assessments of health facilities purposively selected from those providing services to crisis-affected populations as well as an assessment of a convenience sample of providers’ knowledge and attitudes; and
2. A qualitative approach using and key informant interview (KIIs) and focus group discussions (FGDs).

Assessment team

The assessment team was led by Dr. Josep Vargas as Principle Investigator (PI). The team members included:

1. Dr. Marcel Lumbala, UNHCR (lead for facility assessment component)
2. Dr. Robert Anunu, UNHCR
3. Dr. Janvier Kubuya, PNSR North Kivu
4. Nadine Cornier, UNHCR
5. Dr. Philemon Sikulisimwa, UNFPA

UNHCR hosted the assessment team and provided logistical support.

Six facilitators (three men and three women) conducted the focus group discussions. Initially, nine facilitators were identified with the assistance of UNFPA; of these, a final six were selected. The facilitators participated in a three-day training in Goma practice with randomly-invited female patients of the general referral hospital of Masisi Town.

Twelve evaluators were identified by the general referral hospital director and by the Masisi Health Zone director. Evaluators were representatives from the general referral hospital, International Rescue Committee (IRC), PNSR, UNPFA, and UNHCR. They participated in a pre-training in Goma and a two-day training in Masisi Town led by Dr. Marcel Lumbala and Dr. Robert Anunu of UNHCR.

4.2 Methods and tools

Methods used included desk research, health facility assessments, KIIs, FGDs, and questionnaires.

The tools used included:

- Four-part quantitative facility assessment tool that covered:
 - Basic facility information (Method: interview)
 - Staffing and services (Method: interview)
 - Inventory equipment and supplies (Method: observation)
 - Service statistics (Method: record review)
- Key informant interview guides
- In-depth interview guides for community leaders
- Focus group discussion question guides for male and female community members and male and female unmarried young adults (ages 18-25)
- Questionnaires to assess provider knowledge and attitudes.

The four-part quantitative health facility assessment tool was used to assess RH service availability. The introduction collected basic facility information including the size, catchment population, services available, and existence of NGO support for RH. The staffing and services section provided gathered data on human resources and specific RH service provision. The inventory equipment and supplies collected information on basic equipment and RH commodities for each RH service. Service statistics were collected through clinical register review over a 12-month time frame. However, many of

these data were missing due to poor registers or lack of availability of key data points. All tools were translated into French.

Desk research

A review of published and grey literature, including national RH policies, other humanitarian assessments and reports, and publications on national disaster preparedness and humanitarian funding for DRC was undertaken.

Health facility assessments

Twenty-six health facilities were assessed through purposive sampling. A sampling frame was generated (Table 3) with all health facilities (n=31) in Masisi Health Zone. Due to insecurity in the area, five of the 31 health facilities were not accessible. A total of eight facilities were assessed in-depth, which included additional questions and interviews with additional staff.

Table 3. Mapping of health facilities in Masisi Health Zone Total assessed: n=26						
	Health facility	Type of facility	Services provided	IHP	Health facility assessment	Assessed in-depth
1	Masisi Centre	GRH	PCA	MSF-Belgium	Yes	Yes
2	Nyabiondo	RHC	PCA /Limited (C-section & hospitalisation)	MSF-Belgium	Yes	Yes
3	Nyakariba	RHC	PCA /Limited (C-section & hospitalisation)	SCI	Yes	Yes
4	Masisi Centre	HC	PMA + PMTCT	MSF-B	Yes	Yes
5	Kibabi	HC	PCA	SCI & Care	Yes	
6	Bihambwe	HC	PMA	SCI & Care	Yes	
7	Kinigi	HC	PMA	SCI & Care	Yes	
8	Luke	HC	PMA	None	Yes	
9	Kaniro	HC	PMA	None	No	
10	Bukumburire	HC	PMA	None	Yes	
11	Katoy	HC	PMA	None	Yes	
12	Mahya	HC	PMA	UNFPA	No	
13	Ngomashi	HC	PMA	None	No	
14	Mahanga -21	HC	PMA	None	Yes	
15	Boabo	HC	PMA	None	Yes	
16	Loashi	HC	PMA	SCI	Yes	
17	Mbitshi	HC	PMA	SCI	Yes	
18	Bukombo	HC	PMA	UNFPA	Yes	Yes
19	Lwibo	HC	PMA	None	Yes	
20	Lukweti	HC	PMA	None	Yes	
21	Kitsule	HC	PMA	SCI	Yes	Yes
22	Mpanamo	HC	PMA	UNFPA	Yes	
23	Kahanga	HC	PMA	None	No	
24	Mweto	HC	PMA	SCI	Yes	Yes
25	Kalonge	HC	PMA	SCI	Yes	
26	Kanyati	HC	PMA	None	Yes	
27	Buguri	HC	PMA	SCI	Yes	
28	Kilolirwe	HC	PMA	None	Yes	
29	Nyamitaba	HC	PMA	SCI	Yes	Yes
30	Mianosa	HC	No data	No data	Yes	
31	Mihandja	HC	PMA	None	No	
Abbreviations: GRH: General Referral Hospital RHC: Referral Health Center HC: Health Center SCI: Save the Children International PMA: Minimum Package of Activities (including basic EmONC) PCA: Comprehensive Package of Activities (including comprehensive EmONC) IHP: International health partner						

Source: PNSR, UNHCR, UNFPA

Key informant interviews (KIIs)

Seventeen KIIs with representatives from five UN agencies, five international NGOs, and the provincial, regional and health zone levels of the MoH. Three community leaders (two from Lushebebe Camp and one from Masisi Town) were also interviewed. Key informants were identified with the assistance of UNHCR and UNFPA. The objective of the KIIs was to explore integration of RH into humanitarian health response, challenges and successes in service delivery, and planning for, or implementation of, comprehensive RH services.

Interviews were conducted in French by the PI. All interviews were typed in Word and then analyzed using a thematic analysis in order to identify the main themes that emerged from the discussion. The PI translated the findings into English.

Focus group discussions (FGDs)

Fourteen FGDs were held with 133 participants: 114 internally displaced people and 19 members of the local community in Masisi Town. Of the FGDs with the internally displaced communities, three were held with married women, three with unmarried women of 18-24 years of age, three with married men, and three with unmarried men of 18-24 years of age. Two of the FGDs were conducted with the local community (married women and married men) of Masisi Town. Each FGD included 8 to 12 participants.

Participants were selected by community and traditional leaders. The IDPs came from four camps, three of which (Kalinga, Kilimani and Lushebere camps) were located close to Masisi Town and belonging to the Masisi Health Zone under review; one (Mungote Camp) was located close to Kitchanga Town and was part to the Mweso Health Zone.

The aim of the FGDs was to obtain in-depth information on key technical areas of RH services: FP, pregnancy and delivery, HIV/AIDS and other STIs, and GBV as well as the perceptions of the participants regarding accessibility, utilization of, and satisfaction with the health services provided.

The FGDs were conducted in French. A written record of discussions was kept. At the end of the day, the facilitators met to share the notes and agree on the findings. Teams also met with the PI to discuss and clarify issues. Notes were transcribed within a day or two after the FGDs. At the end of the country mission, a summary of the FGDs was drafted and sent to team members for review and comments. The PI translated the findings into English for the report.

As an expression of gratitude for their participation soft drinks and biscuits were offered to the participants after or during the FGDs. Some of the displaced people commented that they would have preferred receiving the monetary value of the drinks, which would have given them the opportunity to buy food for their family.

Questionnaires for RH providers

A total of 13 health providers completed questionnaires to assess their RH knowledge and attitudes. The providers include three medical doctors and 10 nurses.

4.3 Analysis, ethics, and limitations

Analysis

Facility assessment data were entered into CS Pro version 5.0 and analyzed using SPSS version 21 (IBM Corp., Armonk, NY, USA); qualitative data were analyzed using thematic analysis.

Ethics

Ethics approval was obtained through the Columbia University Institutional Review Board. Informed verbal consent was given by all informants.

Limitations

This study faced a number of limitations. Many of the utilization data were missing due to poor registers or lack of availability of key data points; therefore, utilization could not be adequately assessed. Two PIs were originally scheduled to lead the assessments, yet the second investigator was not able to join the mission; staff from UNHCR, UNFPA, IRC, and the local hospital filled this gap. Insecurity was a significant concern. Five of the total health facilities (n=31) were inaccessible due to insecurity.

5. Findings

5.1 Humanitarian RH response

Eleven humanitarian clusters were in place including the Health Cluster, which was led by WHO and co-facilitated by Merlin. The Health Cluster met in Goma Town on a monthly basis and held additional meetings if required. An RH Working Group (RHWG) was established in 2010 under the leadership of UNFPA and brought about an improvement in the flow of RH information and coordination. The RHWG met monthly

and worked in close relation and cooperation with the Health Cluster to coordinate and share information regarding RH programming. The RHWG, through the SPRINT Initiative,³⁹ had provided training on the MISP⁴⁰ (Minimum Initial Service Package for Reproductive Health in Crisis Situations), the minimum standard on RH service provision, to NGO personnel active in RH.

UN agencies and NGOs have developed their own emergency preparedness plans and UNFPA advocated for the systematic inclusion of the MISP in the health component of the respective plans. Depending on their mandates, policies, and priorities, UN agencies and NGOs focused on different aspects of the response. For instance, Save the Children had an emergency preparedness plan in which RH had been mainstreamed as a cross-cutting issue. WHO included the MISP in its preparedness plan and pre-positioned emergency kits, which were delivered to operational partners active in the emergency areas. MSF-Belgium had a sizeable response stock for any kind of emergency, which was located at the general referral hospital in Masisi. As part of preparedness activities, it also coached health providers for the organization of an emergency response.

MSF-Belgium and Save the Children were the main international health partners supporting health facilities in the Masisi Health Zone. MSF-Belgium provided comprehensive support to three health structures: the general referral hospital, Nyabiondo referral health center, and Masisi health center. This support included staff incentives, drugs and medical supplies for all components of the PCA; some infrastructure rehabilitation and repair, vehicle and maintenance for patient referral; staff supervision and training, community health promotion through training, support for community health workers and traditional birth attendants; and mobile clinics to provide emergency health care to the population with no access to health facilities. As a result, the referral structures supported by MSF-Belgium were able to provide a comprehensive, free-of-charge PCA.

Save the Children supported 12 health centers for the provision of the PMA, with an emphasis on the provision of FP and post-abortion care (PAC). The medicines provided may or may not cover the needs of the entire population in a health center catchment area. As long as the medicines were available in the framework of Save the Children's

³⁹ International Planned Parenthood Federation. *SPRINT, Essential Services in Crisis Situations*. <http://www.ippf.org/our-work/what-we-do/humanitarian/sprint-essential-services-crisis-situations>

⁴⁰ Inter-Agency Working Group on Reproductive Health in Crisis. Minimum Initial Service Package for RH in Crisis Situations. <http://misp.rhrc.org/>.

contribution, they were provided free of charge, otherwise patients had to purchase them in a private pharmacy.

The other 15 health centers of the Health Zone did not receive any external support. The provision of the PMA was therefore incomplete, of poor quality, and subject to user fees that represented an important economic barrier to care for the population.

5.2 General

The following section presents data collected on the health facilities assessed, including NGO/UN support for RH, general infrastructure, infection prevention, and available human resources.

5.2.1 Summary of facilities

Twenty-six health facilities in the Masisi Health Zone were assessed, including one hospital and 25 health centers (Table 4). The MoH operated the hospital in addition to 21 health centers; the remaining four health centers were run by religious groups. The hospital provided care to approximately 378,000 people and contains 171 beds. Each health center served an average of 12,870 people and averaged eight beds.

Table 4. Summary of facilities (n=26)		
	Hospital (n=1)	Health center (n=25)
Facility type (s)	1	25
Operating agency (ies)	MoH	21 MoH, 4 religious
Mean catchment population	378,000	12,870
Mean number of beds	171	8

5.2.2 UN/NGO support

Data were collected regarding UN/NGO financial support for the provision of specific RH services (Table 5). For the delivery of FP services, 68% of health centers received UN/NGO support. Similarly, 60% of health centers reported UN/NGO support for emergency obstetric and newborn care (EmONC). Approximately half of the health centers received funding for PAC, STIs/HIV and GBV. The hospital receives UN/NGO support (primarily from MSF-Belgium) for all RH activities outlined above.

Table 5. Facilities that receive NGO/UN support for RH by topic (n=26)		
	Hospital (n=1)	Health center (n=25)
Family planning	1	17 (68%)
Emergency obstetric and newborn care	1	15 (60%)
Post-abortion care	1	12 (48%)
STIs/HIV	1	12 (48%)
Gender-based violence	1	12 (48%)

5.2.3 General infrastructure

Data on infrastructure including functional power and water supplies were collected (Table 6). The hospital was fully functional whereas less than half of the health centers reported access to a functioning power supply and 14 (56%) reported access to a reliable water supply.

Table 6. General infrastructure (n=26)		
	Hospital (n=1)	Health centers (n=25)
Functioning power supply	1	10 (40%)
Source of power	Generator	Power lines (1), solar (9), generator (2), solar & power lines (1)
Functioning water supply	1	14 (56%)
Source of water	Inside plumbing	Inside plumbing & rainwater catchment (1), inside plumbing (8), outdoor pump or protected well (3), pump & rainwater catchment (2), rainwater catchment (2)

5.2.4 Infection prevention

Table 7 provides a breakdown of facilities with essential infection prevention supplies. The hospital was adequately supplied with minimum infection prevention materials. However, two-thirds of health centers did not have plastic sheeting and half lacked an autoclave for sterilization. Proper disposal of sharps was also absent in 40% of health centers. The assessment found that only four (16%) of the 25 health centers were equipped with minimum infection prevention supplies, which denotes infection prevention as a key area of concern within health centers in Masisi Health Zone.

Table 7. Facilities with essential infection prevention supplies available (n=25)		
Infection prevention supplies	Hospital (n=1)	Health centers (n=24)
Washing station with soap	1	18 (75%)
Plastic sheeting	1	8 (33.3%)
Non-sterile gloves	1	23 (95.8%)
Sterile gloves	1	19 (79.2%)
Antiseptics	1	23 (95.8%)
Apron	1	17 (70.8%)
Autoclave (or other appropriate equipment for sterilization)	1	12 (50%)
Incinerator	1	16 (64%)
Sharps are separated from other waste and disposed of properly.	1	15 (60%)
Facilities with all minimum infection prevention supplies available	1	4 (16%)

5.2.5 Human resources

As described in the Background section, health facilities are designated as health posts, health centers, referral health centers, and referral hospitals. In terms of staffing, the health post has a nurse and an auxiliary (trained community agent). Each health center should have two to three nurses, a hygienist, a guard, and a receptionist. At a general referral hospital, a greater range of experienced medical staff is available.

The main referral health facility for the Health Zone was the Masisi general referral hospital, which was supported by staff provided by MSF-Belgium including a medical doctor, two midwives, a psychologist and an auxiliary nurse who supported the sexual violence program. The staff and material resources provided by MSF-Belgium enabled the hospital to deliver a complete PCA and ensure that referral services were available for the entire Health Zone free of charge.

Key findings from data collected on available personnel in health facilities showed that the hospital had a range of trained staff whereas health centers lack providers with the skills to deliver key RH services (Table 8). Notably, one quarter of health centers did not have a qualified health provider on staff at all times. Only one facility had at least one provider trained to perform induced abortion. Additionally, more than one quarter of health centers did not have a provider trained to provide CMoR. Providers trained in

adolescent friendly services were not available at any of the health centers, a significant gap.

Table 8. Human resources (n=25)		
	Hospital (n=1)	Health centers (n=24)
At least one qualified provider on site during the night and on weekends	1	18 (75%)
At least one qualified provider on site or on call during the night and on weekends	1	18 (75%)
At least 1 provider able to provide short-acting FP methods	1	16 (66.7%)
At least 1 provider able to provide long-acting FP methods	1	15 (62.5%)
At least 1 provider able to provide permanent FP methods (at least one of tubal ligation and/or vasectomy)	1	2 (8%)
At least 1 provider able to provide basic EmONC services	1	16 (69.6%)
At least 1 provider able to provide comprehensive EmONC	1	0
At least 1 provider able to provide post-abortion care	1	14 (58.3%)
At least 1 provider able to provide induced abortions	ND*	1 (5.6%)
At least 1 provider able to provide adolescent-friendly services	ND*	0
At least 1 provider able to provide clinical management of rape	1	18 (72%)

*No data

In addition, some community outreach on RH is conducted by the *Relais Communautaires*, or community health workers (CHW). Although they have had some training to carry out RH promotion and sensitization activities as well as follow-up of selected patients, they receive no official incentive for their work.

5.3 Family planning (FP)

5.3.1 Overview

Following the 2nd National Conference on Repositioning Family Planning held in Kinshasa in 2009, the MoH finalized a National Strategic Plan for Family Planning as a part of the National Health Development Plan (PNDS) 2011-2015 in acknowledgement of a systemic lack of FP programming within the health system.⁴¹ The National Strategic Plan for Family Planning was adopted on 10 January 2014 and covers the period from 2014 to 2020. The two main objectives of this plan are to increase the prevalence of

⁴¹ Democratic Republic of the Congo Ministry of Health, Department of Family Planning. *Plan Stratégique National à vision multisectorielle (2014-2020)*. 2014, p. 1.

modern FP methods from 5% to 19% by 2020 and ensure access and utilization of modern FP to at least 2.1 million women by 2020.⁴²

The plan acknowledges that FP has been traditionally funded by USAID, UNFPA, and IPPF. In fact, bi/multi-lateral organizations have funded 85% of FP provisions and programming, while households have contributed 15%. The central government, however, has allocated less than 1% of available funding for FP services within the country. This plan aims to increase government commitment toward FP funding and program implementation.⁴³

The 2010 Multiple Indicator Cluster Survey (MICS) reports several key indicators of RH within DRC. The total fertility rate of a woman in DRC was assessed at 6.3 children. Among women between the ages of 15-49 who are married or living with a partner, 18% are currently utilizing a contraceptive method, although only 5% are employing a modern method. The MICS reports that 24% of women who are married have an unmet need for contraception, 18% of those desired contraception for birth spacing and 6% for birth limitation.⁴⁴

5.3.2 Service delivery

In Masisi Health Zone, the hospital and one-fifth of the health centers assessed met the criteria as a functioning FP service delivery point, classified as having provided IUDs, implants, oral contraceptive pills (OCP), and injectable contraceptives in the last three months, equipped with skilled staff to provide the service, and stocked with supplies and equipment to provide a minimum mix of FP methods at the time of the assessment (Table 9). (See Tables A1-A5 in the Appendix for a detailed breakdown). Less than half of the facilities offered short-acting methods; long-acting methods were even less available.

⁴² Ibid., p. 1

⁴³ Democratic Republic of the Congo Ministry of Health, Department of Family Planning, *Plan Stratégique National à vision multisectorielle (2014-2020)*. 2014, p. 24.

⁴⁴ Democratic Republic of the Congo, National Institute of Statistics/UNICEF. *Enquête par Grappes à Indicateurs Multiples en République Démocratique du Congo: 2010 Synthesis Report*, May 2011.

Table 9. Provision of family planning services to an acceptable standard (n=26)		
	Hospital (n= 1)	Health center (n=25)
IUD	1	9 (36%)
Implant	1	5 (20%)
Oral contraceptive pill	1	12 (48%)
Injectable contraceptive	1	10 (40%)
Functioning FP service delivery point	1	5 (20%)

The hospital offered tubal ligation although not vasectomy (Table 10). Condoms and emergency contraception (EC) as a FP method were limited with half of the health facilities providing condoms and 42.3% (11) providing EC in the previous three months⁴⁵ (Table 9). Although 42.3% (11) of health facilities self-reported the delivery of EC, only 3.8% documented the client within the register, highlighting gaps in documentation and health facility management.

Table 10. Long-acting and permanent family planning services provided & reasons not provided (n=26)				
Function	IUD	Implant	Tubal ligation	Vasectomy
Provided in the past 3 months (self-report)	13 (50%)	16 (61.5%)	1 (3.8%)	0
Provided in the past 3 months (clients noted in registers)	12 (46.2%)	16 (61.5%)	1 (3.8%)	0
Main reason service not provided				
Lack of skilled staff/training	7 (53.8%)	7 (26.9%)	14 (56%)	13 (50%)
Lack of supplies / equipment	11 (84.6%)	8 (30.8%)	13 (50%)	13 (50%)
Not authorized to provide	2 (15.4%)	1 (3.8%)	19 (73.1%)	20 (76.9%)

⁴⁵ This pertains specifically to emergency contraception as a family planning method not as part of post-rape treatment. See section 5.6.2 for data on emergency contraception as part of clinical care for survivors of sexual assault.

Table 11. Short-acting family planning services provided and reasons not provided (n=26)				
Function	Oral contraceptive pills	Injectable contraceptive	Emergency contraception	Condoms (male or female)
Provided in the past 3 months (self-report)	19 (73.1%)	19 (73.1%)	11 (42.3%)	13 (50%)
Provided in the past 3 months (clients noted in registers)	16 (61.5%)	178 (69.2%)	1 (3.8%)	4 (15.4%)
Main reason service not provided				
Lack of skilled staff/training	7 (100%)	7 (100%)	5 (35.7%)	1 (7.7%)
Lack of supplies / equipment	7 (100%)	7 (100%)	10 (71.4%)	9 (69.2%)
Not authorized to provide	0	0	3 (21.4%)	1 (7.7%)

Lack of supplies was a major barrier to FP service provision generally. Although many health centers had provided FP services previously, few had supplies available at the time of the assessment. For example, although 61.5% (16) of health facilities had provided implants in the previous three months, only 20% (5) met the criteria to adequately provide implants at the time of the assessment, primarily due to lack of supplies. Regarding IUDs, 84% of facilities that did not provide IUDs previously reported that they lacked supplies. One hundred percent of health facilities that did not provide OCPs or injectables reported that they lacked both supplies and staff. For all facilities, the majority of facilities had at least one staff person trained in short- and long-acting methods (Appendix Tables A2 to A5.)

5.3.3 Provider knowledge and attitudes

Knowledge and formal instruction for providers were lacking in regards to FP counseling and procedures. As demonstrated in Appendix B, all 13 providers who completed the knowledge and attitudes questionnaire indicated that they counseled women and girls about FP and contraception in the three months prior to the study, although only nine of the 13 providers stated they received training to provide FP counseling. Knowledge of IUD insertion was higher than practice: nine health providers had been trained in the service, while six had delivered the service in the last three months. Contraceptive implant services were delivered within the last three months by nine providers while eight were qualified to provide the service.

Providers were given a list of statements and asked to mark whether they strongly agreed, agreed, disagreed or strongly disagreed with each statement. Each answer choice was assigned a score between 1 and 4, with higher scores reflecting attitudes that promote high quality family planning services. Generally, providers agreed that FP should be available to every woman who wants to use a method. However, providers reported mixed attitudes on whether a woman should be able to obtain FP methods without her husband's presence: the mean score of 2.57 was low enough to indicate that some providers feel that a husband's presence is necessary for a woman to access FP methods. In regards to adolescents, providers largely agreed (3.57 mean) that adolescent boys and girls need to know how to prevent pregnancies; they were mixed—with a mean score of 2.86—about whether parental consent should be required for young unmarried women to access FP.

5.3.4 Focus group discussions

Focus group discussions with married and unmarried men and women provided insight on attitudes towards and barriers to FP methods. Men and women in all focus groups were able to list various methods to avoid pregnancy, including condoms, OCPs, injections, and implants as well as the benefits of these methods. Most focus groups stated that they could obtain FP services at their local health center or at Masisi Hospital free of charge. Unmarried men in the Kalinga focus group, however, stated that they did not know where to go to obtain condoms and the married men of Mungote camp revealed that they used to go to Kitumaini health center for condoms but that it had closed.

Focus group participants voiced several socio-cultural barriers to contraceptive use in addition to misconceptions held about contraceptive methods. The stigmatization of contraceptive use was frequently cited by FGDs for reduced utilization of FP services. Most focus groups agreed that young women experience the most difficulty in accessing FP services. The Kalinga and Kilimani focus groups reported that unmarried women find accessing FP more difficult as medical staff ask that they come with a family member to give permission for the service, although this is not required. The Masisi host community focus group also believed that a woman is not admitted for FP services unless she is accompanied by her husband. Furthermore, the Mungote camp focus group specified that if a woman seeks contraception without her husband, he will likely believe she is being “unfaithful or prostituting herself.” Married men of the Masisi host community stated that a woman seeking FP might be viewed as a sex worker and therefore stigmatized. The Lushebere camp focus group indicated that condoms were

mainly used by sex-workers. Married women of the Masisi community reported that making FP available to young women will exacerbate “promiscuity”. Additionally, a common misconception about condom use was that they would “tear up” and “remain in the woman’s belly.” Although most focus group participants knew where to access FP methods, cultural and social stigmas coupled with misconceptions about FP methods were leading barriers to contraceptive use among these groups.

5.4 Emergency obstetric and newborn care

5.4.1 Overview

According to the 2013 State of World’s Mothers Report, DRC is the worst place to be a mother.⁴⁶ Most recent estimates from 2010 place the maternal mortality ratio (MMR) at 540 maternal deaths per 100,000 live births.⁴⁷ In 2010, the DRC was ranked 17th among countries with the highest MMR;⁴⁸ Congolese women have an average of 6.3 children in their lifetime.⁴⁹ Early motherhood is common in the DRC; nearly 28% of young women between the ages of 15-19 years old has given birth or is pregnant.⁵⁰ Almost 4% of young women have had their first child before the age of 15.⁵¹ Obstetric care are crucial components of RH service delivery within DRC and the Masisi Health Zone specifically.

MICS data shows that 74% of women in DRC are attended by trained personnel such as a physician, a nurse, or a midwife, during childbirth and three out of four pregnant women give birth in a health facility.⁵² However, in rural areas like Masisi, almost one third of deliveries occur at home.⁵³ Of women between the ages of 15-49 who delivered within the two preceding years of the 2010 MICS survey, 87% received antenatal care once after delivery, yet only 44% of these women made the recommended four

⁴⁶ Save the Children. *State of the World’s Mother’s Report*. May 2013.

http://www.savethechildren.org/atf/cf/%7B9def2ebe-10ae-432c-9bd0-df91d2eba74a%7D/SOWM-FULL-REPORT_2013.PDF.

⁴⁷ UNFPA. *State of the World Population 2013: Motherhood in Childhood: Facing the Challenge of Adolescent Pregnancy*. 2013. <http://www.unfpa.org/webdav/site/global/shared/swp2013/EN-SWOP2013-final.pdf>.

⁴⁸ CIA World Factbook. 2010. http://www.maternalmortalitydata.org/inner.html?country_selection=O.

⁴⁹ Democratic Republic of the Congo, National Institute of Statistics/UNICEF. *Enquête par Grappes à Indicateurs Multiples en République Démocratique du Congo: 2010 Synthesis Report*. May 2011.

⁵⁰ UNICEF, *Global Evaluation Databases*, 2012.

⁵¹ Ibid.

⁵² Democratic Republic of the Congo, National Institute of Statistics/UNICEF. *Enquête par Grappes à Indicateurs Multiples en République Démocratique du Congo: 2010 Synthesis Report*. May 2011. p.16.

⁵³ Ibid.

antenatal care visits.⁵⁴ Data from 2011 suggests that infant mortality rate is 97 per 1000 live births.⁵⁵

5.4.2 Service delivery

Table 8 introduced in section 5.2.5 on *Human Resources* outlines data demonstrating the availability of skilled professionals to provide RH care. The table shows that 25% (6) of health centers were not equipped with an on-site or on-call provider during nights and weekends and 30% (8) did not have access to a skilled provider able to provide basic EmONC services. This indicates a fundamental gap in the ability to provide life-saving obstetric care. Up to 15% of all pregnant women will be experiencing a life-threatening complication requiring EmONC.⁵⁶ If care is not available at night and on the weekend, or if a skilled provider is not in place, pregnant women are at increased risk of disability or death.

Emergency obstetric and newborn care (EmONC)

A functioning EmONC delivery point was defined as being able to adequately provide the following signal functions, or life-saving obstetric interventions, as recommended by WHO.⁵⁷

For basic EmONC (BEmONC)

- Administration of parenteral antibiotics
- Administration of uterotonic drugs
- Administration of parenteral anticonvulsants
- Manual removal of placenta
- Removal of retained products
- Assisted vaginal delivery
- Neonatal resuscitation with bag and mask

For comprehensive EmONC (CEmONC)

All of the above plus:

- Blood transfusion
- Caesarean section

⁵⁴ Ibid.

⁵⁵ Ibid.

⁵⁶ IAWG. *Inter-agency Field Manual on Reproductive Health in Humanitarian Settings*. 2010. <http://www.iawg.net/IAFM%202010.pdf>.

⁵⁷ WHO, UNFPA, UNICEF, AMDD: *Monitoring emergency obstetric care: a handbook*. Geneva; 2009.

Hospitals should be able to provide CEmONC and health centers should be able to provide BEmONC. In order to qualify as a functioning service delivery point, facilities must have provided the appropriate signal functions in the previous months, trained staff must have been in place, and equipment and supplies to provide the respective signal functions in evidence at the time of the assessment. Availability of partographs, blood pressure cuff, and stethoscope, which are essential to provide good delivery care, were also required. (See Appendix A for further details on components assessed per signal function.) Neonatal resuscitation is included in EmONC; additional essential elements of newborn care were also assessed.

None of the health facilities were functioning BEmONC service delivery points and the referral hospital was not able to meet the criteria for a CEmONC service delivery point (Table 12).⁵⁸ Assisted vaginal delivery and provision of parenteral anticonvulsants were the main gaps with only one out of the 25 health centers providing these signal functions. Provision of parenteral antibiotics and parenteral uterotonics were also low with only 2 (8.3%) and 4 (16.7%) health centers, respectively, providing this care. Although the hospital met the criteria as a BEmONC facility and was also able to adequately perform Caesarean section, it lacked supplies to adequately provide blood transfusion.

⁵⁸ See Tables A7 to A12 in Appendix A for details on each of the signal functions.

Table 12. Provision of EmONC to an acceptable standard (n=26)		
	Hospital (n=1)	Health center (n=25)
At least one staff trained to provide BEmONC	1	16 (69.6%)
Parenteral antibiotics	1	2 (8.3%)
Parenteral uterotonics	1	4 (16.7%)
Parenteral anticonvulsants	1	1 (4%)
Manual removal of placenta	1	7 (28%)
Removal of retained products	1	11 (44%)
Assisted vaginal delivery	1	1 (4%)
Neonatal resuscitation with appropriate bag and mask	1	5 (20%)
Partograph	1	21 (87.5%) ND* (1)
Blood pressure cuff	1	20 (83.3%) ND* (1)
Stethoscope	1	22 (91.7%) ND* (1)
Functioning BEmONC service delivery point	1	0
At least one staff trained to conduct blood transfusion	1	NA
Blood transfusion	0	NA
At least one staff trained to perform caesarean section	1	NA
Caesarean section	1	NA
Functioning CEmONC service delivery point	0	NA

Tables 13a and 13b present data on each of the nine signal functions, including if the function was provided in the three months prior to the study and the main reasons why the service was not provided. Lack of authorization and lack of supplies were the primary barriers to service provision. For example, most health facilities (18) reported that they were unable to provide assisted vaginal delivery—one of the biggest gaps—due to lack of authorization followed by 15 that cited lack of supplies. Although only one health center was adequately equipped to provide parenteral anticonvulsants at the time of the assessment, six (25%) had provided this signal function in the previous three months. Again, lack of authorization and supplies were the key barriers. A dearth of supplies significantly limited the provision of neonatal resuscitation: only 5 (20%) health centers provided this signal function and, of those not providing it, 15 (88.2%) attributed this to insufficient supplies. The hospital provided blood transfusions despite lacking essential equipment such as airway needles for collecting and giving blood and blood collection bags to safely do so. (See Appendix: Table A13).

Table 13a. EmONC signal functions provided & reasons for not providing (n=25)										
Function	Parenteral antibiotics		Parenteral uterotonics		Parenteral anticonvulsants		Manual removal of placenta		Removal of retained products	
	Hosp	HC	Hosp	HC	Hosp	HC	Hosp	HC	Hosp	HC
Provided in the last 3 months (self-reported)	1	11 (45.8%) ND*(1)	1	5 (20.8%) ND* (1)	1	6 (25%) ND* (1)	1	10 (41.7%) ND* (1)	1	11 (45.8%) ND* (1)
Main reason service not provided										
Lack of skilled staff/ training	3 (23.1%)		7 (36.8%)		3 (17.6%)		3 (21.4%)		9 (69.2%)	
Lack of supplies / equipment	8 (61.5%)		7 (36.8%)		7 (41.2%)		6 (42.9%)		11 (84.6%)	
Not authorized to provide	5 (38.5%)		12 (63.2%)		8 (47.1%)		3 (21.4%)		3 (23.1%)	

*No data

Table 13b. EmONC signal functions provided & reasons for not providing (n=25)								
Function	Assisted vaginal delivery		Neonatal resuscitation with bag and mask		Blood transfusion		Caesarean section	
	Hosp	HC	Hosp	HC	Hosp	HC	Hosp	HC
Provided in the last 3 months (self-reported)	1	1 (4.2%) ND* (1)	1	6 (25%) ND* (1)	1	0 ND* (1)	1	2 (8.3%) ND* (1)
Main reason service not provided								
Lack of skilled staff/training	10 (43.5%)		9 (52.9%)		9 (39.1%)		12 (54.5%)	
Lack of supplies / equipment	15 (65.2%)		15 (88.2%)		14 (60.9%)		13 (59.1%)	
Not authorized to provide	18 (78.3%)		1 (5.9%)		17 (73.9%)		21 (95.5%)	

*No data

Regarding referrals of obstetric emergencies, health centers supported by MSF-Belgium and to some extent Save the Children have established effective referral systems. However, a number of health centers reported that a referral system was absent or defunct, with neither transportation means nor a communication system in place.

Newborn care

Data on additional essential elements of newborn care were collected, including having provided neonatal resuscitation in the previous three months, the availability of skilled staff trained to provide breastfeeding support, newborn infection management, thermal care, cord care, kangaroo care, delivery practices for prevention of mother-to-child transmission of HIV (PMTCT) as well as drugs for infection management. The referral hospital had these life-saving services in place although none of the health centers did, revealing a significant gap (Table 14). The health centers reported shortages of ambu bags and infant face masks as well as drugs. The main barriers reported by providers were lack of equipment and drugs as well as an absence of trained staff, in particular providers trained in newborn infection management and special delivery care practices for PMTCT.

Table 14. Facilities with essential elements of newborn care (n=26)		
	Hospital (n=1)	Health center (n=25)
Neonatal resuscitation with appropriate bag and mask performed in the last 3 months	1	5 (20%)
At least one provider trained to provide		
Special delivery care practices to prevent mother-to-child transmission of HIV	1	10 (43.5%) ND* (2)
Newborn infection management (including injectable antibiotics)	1	8 (34.8%) ND* (2)
Thermal care (including immediate drying and skin-to-skin care)	1	13 (56.5%) ND* (2)
Sterile cord cutting and appropriate cord care	1	20 (87%) ND* (2)
Kangaroo care for low birth weight babies	1	18 (78.3%) ND* (2)
Breastfeeding (early and exclusive)	1	14 (60.69%) ND* (2)
Partograph	1	21 (87.5%) ND* (1)
Resuscitation bag and infant face mask	1	8 (33.3%) ND* (1)
Infant scale	1	14 (58.3%) ND* (1)
Fetoscope	1	17 (70.8%) ND* (1)
Corticosteroids (dexamethasone)	1	5 (20.8%) ND* (1)
Ampicillin injectable	1	7 (29.2%) ND* (1)
Gentamycin injectable	1	6 (25%) ND* (1)
Ceftriaxone injectable	1	3 (13%) ND* (2)
Facilities with all essential elements of newborn care	1	0

5.4.3 Provider knowledge and attitudes

Data documenting attitudes among providers regarding safe deliveries were promising. Overall, providers strongly agreed that pregnant women should visit a health facility to monitor progress (a mean of 3.86 out of 4) and that delivering in a health facility is safer than delivering a baby at home (mean of 3.93). However, of the 13 providers, many demonstrated that they lacked key knowledge about EmONC and newborn care. (See results in Appendix B). For example, when asked what they do when a woman who has just given birth has not delivered the placenta, the providers on average specified that

they perform only three of the 10 procedures that should be conducted. When asked what immediate care the providers administered to the newborn the last time the delivered a baby, on average they were able to indicate only five of the 11 key newborn care services. Regarding what special care to provide a newborn less than 2.5 kg, on average providers named only one-third of the five key activities.

5.4.4 Focus group discussions

Despite service delivery gaps, very positive changes in knowledge, attitudes and behaviors were found regarding pregnancy and delivery, reflecting significant progress in this area. Focus group participants reported that women used to give birth at home, but after significant awareness-raising campaigns and outreach by the MoH, the norms had changed. They were aware of the benefits of facility births such as treatment from complications. Married and unmarried men and women were also aware of their options regarding where to give birth. All focus groups mentioned that pregnant women can seek care at health centers and the Masisi hospital. They noted that many women go to Masisi hospital because services are free and the hospital is “comfortable.” The Lushebere focus group said that they go to the health centers to seek care but are referred to the hospital if complications arise. All male focus groups agreed that the hospital was the best place for a woman to give birth in order to avoid complications in addition to avoiding fees from administrative officials. One man from Mungote Camp commented, “One does not marry women who do not give birth at the hospital.”

Although focus groups reported that most women give birth in a health facility, the Masisi host community focus group indicated that some women give birth at home due to large distances from the health centers and because giving birth in a hospital is a sign of “laziness.”

Access to health facilities, however, was varied. The time it took to reach a health center depended on the camp. The Kalinga focus group reported that it can take an hour to walk to the health center and that is especially hard to reach the hospital in case of complications. The Mungote Camp was said to be about a 30 minute walk from the nearest health center. Men and women reported that women in labor are often transferred to the health center or hospital by stretchers.

Generally, women said that they go to the health centers to receive antenatal care. However, the Kalinga focus group stated that unmarried pregnant women are ashamed of going at the same time as married women. Overall, the informants described positive

attitudes and practices toward giving birth at a health facility, although some cultural barriers remain. A primary concern for EmONC as revealed by the FGDs is the distance of some camps to a health facility and the lack of transport.

5.5 Comprehensive abortion care

5.5.1 Overview

According to Penal Codes 165 and 166, in DRC, abortion is only permitted to save a woman's life.⁵⁹ An estimated 13% of maternal deaths are due to unsafe abortion.⁶⁰ In 2003, a cross-sectional study of 500 women (aged 15-49) in DRC found that, of those who had been pregnant, 16% chose induced abortion.⁶¹ This is higher than the average of 13% for Africa as a whole.⁶² More than 97% of abortions in Africa as a whole are unsafe,⁶³ and unsafe abortion in Middle Africa—where DRC is located—is amongst the highest in the world with a rate of 36 unsafe abortions per 1,000 women (aged 15-44).⁶⁴

Regarding North Kivu specifically, one small study at a referral hospital in Goma found that almost half (48.2%) of the 83 women presenting with bleeding reported that they had resorted to an unsafe abortion; the remainder presented with incomplete spontaneous abortion or early pregnancy failure.⁶⁵ Another study among 328 school girls aged 16-20 in Goma found that 9.8% had had an unsafe abortion; four out of five knew someone who had resorted to an unsafe abortion.⁶⁶

⁵⁹ Kalonda, J. C. O. Violence sexuelle au Congo-Kinshasa: nécessité de la dépénalisation de l'avortement, *Rev Med Brux*, no. 33 (2012): 482-486.

⁶⁰ Ministère de la Santé Publique, Programme National de Santé de la Reproduction, *Politique nationale et plan directeur de développement de la santé de la reproduction. République Démocratique du Congo*, 2004.

⁶¹ Kayembe, P. K., Fatuma, A. B., Mapatano, M. A., & Mambu, T. "Prevalence and determinants of the use of modern contraceptive methods in Kinshasa, Democratic Republic of Congo," *Contraception*, 74, no.5 (2006): 400-406.

⁶² The Guttmacher Institute. Facts on Abortion in Africa. January 2012.

http://www.guttmacher.org/pubs/IB_AWW-Africa.pdf.

⁶³ Population Action International. Unsafe Abortion – Facts and Figures. <http://populationaction.org/wp-content/uploads/2013/12/UnsafeAbortion.pdf>.

⁶⁴ World Health Organization (WHO). *Safe and Unsafe Induced Abortion: Global and Regional Levels in 2008, and Trends during 1995–2008*. 2012.

http://apps.who.int/iris/bitstream/10665/75174/1/WHO_RHR_12.02_eng.pdf?ua=1.

⁶⁵ Kisindja, R.M., Benfield, N. Wright, M. "M156 Induced abortion in Eastern Democratic Republic of Congo – A descriptive study," *International Journal of Gynecology and Obstetrics*, vol. 119 S583 (2012).

⁶⁶ Lussy J. Paluku ; Langalibalele H. Mabuza ; Patrick M.h. Maduna ; John V. Ndimande. "Knowledge and attitude of schoolgirls about illegal abortions in Goma, Democratic Republic of Congo," *African Journal of Primary Health Care and Family Medicine* v. 2.1 (2010).

5.5.2 Service delivery

A functional post-abortion care (PAC) delivery point was defined as having provided PAC services in the last three months, being equipped with skilled staff to provide the service, offering FP to all PAC clients before discharge, and having sufficient supplies to provide manual vacuum aspiration (MVA) or misoprostol specifically for PAC. The hospital met the criteria as a PAC service delivery point; however, less than half the health centers assessed (11) were able to adequately provide the service (Table 15). PAC with MVA was most common and only two health centers provided PAC with misoprostol. Approximately half of all health facilities assessed offered FP to PAC clients before discharge. (See Appendix: Table A17 for additional details.)

Table 15. Provision of PAC to an acceptable standard (n=26)		
	Hospital (n=1)	Health center (n=25)
FP is offered to all PAC clients	1	13 (52%)
PAC with MVA	1	9 (37.5%)
PAC with misoprostol (<i>optional</i>)	1	2 (8%)
Functioning PAC service delivery point	1	11 (44%)

Lack of supplies was a main gap in providing PAC as outlined in Table 16. Health facilities reported a dearth of misoprostol and insufficient equipment including MVA syringe, adapters and cannulae, uterine tenaculum, and sponge forceps. Approximately half of the health centers had at least one provider trained in PAC. (See Appendix: Table A18 for additional details).

Table 16. Comprehensive abortion care provided & reasons not provided (n= 26)						
<i>Function</i>	PAC with MVA		PAC with misoprostol		Induced abortion	
	Hosp	HC	Hosp	HC	Hosp	HC
Post-abortion care (PAC) provided in last 3 months (self-reported)	1	11 (45.8%) ND* 1	1	2 (8%)	0	0
Main reason service not provided						
Lack of skilled staff/training	9 (69.2%)		12 (46.2%)		8 (30.8%)	
Lack of supplies / equipment	11 (84.6%)		20 (87%)		9 (34.6%)	
Not authorized to provide	3 (11.5%)		6 (23.1%)		21 (80.8%)	

None of the health facilities assessed offered induced abortion, despite legal indications that permit abortion when the woman's life is in danger. Lack of authorization was cited as the main barrier to providing this essential service.

5.5.3 *Provider knowledge and attitudes*

In the questionnaires filled out by the 13 providers (Appendix B), one reported having performed an induced abortion using MVA, and two reported performing an induced abortion using misoprostol in the three months prior to the assessments. There is some uncertainty in regards to these statements as none of the health facilities assessed reported that they had performed induced abortion. Only two providers stated that they had been trained to provide an induced abortion using MVA and three stated that they had been trained to provide an induced abortion using misoprostol.

Eight providers indicated that they performed manual vacuum aspiration for PAC and four acknowledged that they provided PAC using misoprostol. When asked about information to give to patients who were treated for an incomplete or unsafe abortion, on average providers named only two out of six key pieces of information. On average, providers were able to name about half of the five key immediate complications from unsafe abortion.

5.5.4 *Focus group discussions*

Focus group discussions revealed negative attitudes towards induced abortion. Most married and unmarried men and women stated that if a couple has an unwanted pregnancy, they will generally allow the pregnancy to evolve because "abortion is against the tradition." The Kalinga and Mungote focus groups stated that "abortion is killing" and the Lushbere focus group expressed that pregnancy should be accepted according to Christian beliefs.

The Kilimani Camp focus group said that young women would think of going to the health center to have an abortion. Unmarried women of the Mungote focus group stated that some women may want to abort in cases where the father abandons them but may not know where to do so. Unmarried men of the Mungote focus group reported that mostly sex workers and girls who have sexual relations with several boys abort. Married women within the Masisi host community focus group suggested that a married woman occasionally aborts without the knowledge of their husband if the pregnancy is the outcome of an affair or if the husband was not expecting her to become pregnant.

5.6 HIV and other sexually transmitted infections

5.6.1 Overview

DRC is experiencing a generalized HIV epidemic: as of 2012, HIV prevalence was 1.1% among adults aged 15-49.⁶⁷ Almost half a million people—approximately 480,000—in DRC were estimated to be living with HIV.⁶⁸ In 2011, MSF reported that only 12% of HIV-positive patients were receiving antiretroviral (ARV) drugs and that nearly 95% of women living with AIDS did not have access to treatment that could help prevent the transmission of the disease to their unborn children.⁶⁹ In 2007, HIV prevalence in North Kivu was estimated to be 4.4%, quadruple the national prevalence.⁷⁰

With respect to condom use, 6% of young men and women aged 15-24 in the DRC used a condom at the time of their first sexual experience, but more men than women did (9% and 5% respectively).⁷¹ Overall, 10% of men and women aged 15-49 reported having used a condom at the time of their last sexual relationship (14% of men and 5% of women). In neighbouring South Kivu province, condom use among men aged 15 - 24 is 4%, and those aged 15-49 is estimated to be 19%.⁷²

To address the epidemic, the *Plan National de la Lutte Contre le Sida* (National Plan to Fight Against HIV/AIDS) includes a complete package of HIV prevention, care and mitigation activities to be implemented by Health Zones.⁷³ A Health Zone is recognized as functional when it integrates a complete package of services: 1) Prevention: communication (advocacy, social mobilization and behavior change communication), PMTCT, blood safety, voluntary counselling and testing for HIV (VCT), management of STIs; 2) Care and treatment: treatment of accidents related to the blood exposure,

⁶⁷ UNAIDS. *Democratic Republic of the Congo, HIV and AIDS Estimates*. 2012.
<http://www.unaids.org/en/regionscountries/countries/democraticrepublicofthecongo/>.

⁶⁸ Ibid.

⁶⁹ Médecins Sans Frontières (MSF). “Democratic Republic of Congo: Condition Still Critical.” (2011).
<http://www.msf.org/article/dEmONCratic-republic-congo-condition-still-critical>.

⁷⁰ UNDP. *Province du Nord Kivu – Profil Résumé – Pauvreté et conditions de vie des ménages*; PNUD. March 2009. http://www.cd.undp.org/content/dam/dem_rep_congo/docs/povred/UNDP-CD-Profil-PROVINCE-Nord-Kivu.pdf.

⁷¹ Democratic Republic of Congo Ministry of Health. *Atlas De La République Démocratique Du Congo Sur Les Indicateurs Du Vih/sida: Basé Sur Les Résultats De L'enquête Démographique Et De Santé En RDC, EDS-RDC* 2007. 2008.

⁷² Ibid., p. 33-34

⁷³ Democratic Republic of Congo Ministry of Health. *Plan Stratégique de lutte contre le HIV et le SIDA 2008 – 2012*. June 2008.

management of opportunistic infections, provision of ARVs, psychosocial care, laboratory diagnosis; and 3) Support services: planning, coordination, epidemiological surveillance, monitoring and evaluation, medication management and inputs, operational research, biomedical waste management, supervision. However, as of late 2007, no Health Zone was offering a complete package of activities to address HIV and AIDS.⁷⁴

5.6.2 Service delivery

Adequate provision of STI services (syndromic or laboratory testing and treatment) and PMTCT included self-reported provision of the service in the preceding three months and the availability of essential drugs on the day of the assessment. Data were collected on self-reported provision of ART for people living with HIV (PLHIV), voluntary counseling and testing for HIV (VCT), and condoms in the previous three months.

The hospital provided a full range of HIV and STI services assessed (Table 17). Yet health centers lagged. Only one health had provided ART drugs for person livings with HIV in the three previous months and none met the criteria to adequately provide PMTCT. Only one quarter of the health centers assessed provided VCT in the previous three months and roughly half had provided condoms.

Table 17. HIV and other STI services (self-reported) (n=26)		
	Hospital (n=1)	Health center (n=25)
STIs*	1	2 (9%) ND* (2)
PMTCT* (See table 19 for details)	1	0
ART for PLHIV**	1	1 (4%)
Voluntary HIV counseling and testing**	1	6 (25%)
Condom provision**	1	12 (48%) ND* (1)

*Supplies available and service provided in the previous three months

**Service provided in the previous three months only

Lack of supplies followed by lack of training was the primary barrier to service provision across all areas (Tables 18a and 18b). For example, of those that did not provide ART, almost three quarters reported insufficient supplies and 69.6% cited lack of trained staff. Although Table 17 demonstrates that only two health centers met the criteria to

⁷⁴ Democratic Republic of Congo Ministry of Health. *Plan Stratégique de Lutte contre le VIH et le SIDA 2008 – 2012*. June 2008.

adequately provide STI care, 22 out of 25 health centers reported providing this service in the three months prior (see Appendix: Table A 19). They did meet the criteria to provide STI care because they did not have adequate antibiotics available on the day of the assessment. Of those that did not make condoms available, 69.2% reported stock-outs.

Table 18a. HIV and other STI services provided & reasons not providing (n=26)						
<i>Function</i>	Perform syndromic or laboratory diagnosis and treatment of STIs		Provide voluntary HIV counseling and testing		Provide ART for PLHIV	
	Hosp	HC	Hosp	HC	Hosp	HC
Provided in last 3 months (self-reported)	1	22 (88%) ND* (1)	1	6 (25%)	1	1 (4%)
Main reason service not provided						
Lack of skilled staff/training	12 (92.3%)		11 (64.7%)		16 (69.6%)	
Lack of supplies / equipment	14 (100%)		14 (82.4%)		17 (73.9%)	
Not authorized to provide	7 (77.8%)		3 (17.6%)		5 (21.7%)	

Table 18b. HIV and other STI services provided & reasons not providing (n=26)				
<i>Function</i>	Administer ARVs to HIV+ mothers and newborns in maternity		Condom provision	
	Hosp	HC	Hosp	HC
Provided in last 3 months (self-reported)	1	0 ND* (1)	1	12 (48%) ND* (1)
Provided in the past 3 months (clients noted in registers)	0	NA	0	4 (16.7%)
Main reason service not provided				
Lack of skilled staff/training	19 (82.6%)		1 (7.7%)	
Lack of supplies / equipment	21 (87.5%)		9 (69.2%)	
Not authorized to provide	4 (16.7%)		1 (7.7%)	

Regarding PMTCT, Table 18b demonstrates that while the hospital is equipped to provide PMTCT, only one health center had ARVs for mothers and none had ARVs for newborns. Insufficient supplies and equipment as well as a lack of trained staff were reported to be the main barriers to providing PMTCT services.

Table 19. PMTCT services (n=26)		
PMTCT	Hospitals (n=1)	Health centers (n=25)
Administered ARVs to HIV+ mothers in maternity in the last 3 months	1	0
Administered ARVs to newborns born to HIV+ mothers in maternity in the last 3 months	1	1 (4%)
ARVs for the mother available	1	1 (4%) ND* (1)
ARVs for the infant available	1	0 ND* (1)
Facilities adequately provide PMTCT	1	0

Safe blood transfusion and adherence to standard precautions are also key elements to prevent transmission of HIV. As shown on Table A13 in the Appendix, the hospital did not carry all essential components needed to provide safe blood transfusions, including airway needles for collecting and giving blood and blood collection bags. Nevertheless, the hospital was equipped with the resources needed to screen blood for HIV and other blood borne diseases.

Comprehensive data on standard precautions against occupational risks of HIV infection were not collected; however, Table 7 in section 5.2.4 on infection prevention demonstrates that many health centers were not adequately equipped with essential infection prevention supplies. For example, six of the 25 health centers examined did not have sterile gloves, and 10 reported that sharps were not separated from other waste and disposed of properly. Only four of 25 health centers were stocked with the minimum infection prevention supplies.

5.6.3 Provider knowledge and attitudes

Six health of thirteen providers reported that they had administered ARVs for PMTCT in the previous three months and eight providers indicated that they had been trained in the service. When asked about what they do when someone presents with symptoms of an STI, on average providers were able to name half of the five key actions.

5.6.4 Focus group discussions

While all married women, married men and unmarried men FGs had heard about HIV and AIDS, most of the participants of the Mungote Camp's focus group of unmarried women and half of the unmarried women of the Kalinga Camp focus group had not

heard of either. Those who had heard about HIV and AIDS said it was an incurable disease transmitted through unprotected sexual intercourse, the use of sharp objects, and unsafe blood transfusions. All focus groups stated that they were concerned about HIV and listed the following prevention measures: faithfulness/ having a single partner, using condoms, avoiding sharp objects, and sexual abstinence. Across all focus groups, participants listed gonorrhea and syphilis as infections they could contract through sexual intercourse.

All focus groups stated that both women and men are at risk of HIV and STIs but women are more at risk. They specified that sex workers, women who have multiple partners, women who trade sex for goods, women at risk of sexual violence, and victims of rape were most at risk of contracting HIV and STIs.

Unmarried women of Kalinga and Kilimani camps said that voluntary counseling and testing service was not available at the nearby health facilities. The Mungote camp unmarried women focus group, however, reported that organizations provided a free mobile voluntary counselling and testing service in the camp. Focus group participants said that they do not seek testing and gave a number of reasons including: the absence of testing services, fear of the results, fear of lack of confidentiality and of being stigmatized and made to leave the camp (Kalinga and Kilimani camps). Survivors of sexual violence feared being abandoned by their husband. According to married men of the Lushebere Camp, testing must be done in secret due to the risk of being “stoned.” All focus groups reported that if they thought they had an STI including HIV they would go to a health center or the hospital. The Masisi host community focus groups of married women and men said some people might consult a traditional healer. Unmarried men of Kalinga Camp focus group said people also go to traditional healers when they are far from the hospital or do not want everybody to know.

Focus groups revealed low knowledge and usage of condoms. The married men of the Masisi community focus group revealed that some of its participants had never seen a condom. Others from the Masisi host community as well as focus groups from Mungote camp stated that they did not know how to use one. According to FGDs with unmarried women and men of the Kalinga and Kilimani, condoms are no longer available in their camps. Unmarried men of the Kalinga focus group said condoms were too expensive to buy (three units cost 100FC/US\$0.11) so most of their sexual relations are unprotected. All three unmarried men focus groups said they used condoms primarily for sex with sex workers. The Mungote camp married men focus group said they were available in insufficient quantities and that some people do not want to use them or know how to

use them. The married women focus group from the Masisi host community said condoms were available at the hospital but that they did not know the price and were ashamed to purchase them or pick them up for free.

5.7 Sexual violence

5.7.1 Overview

Reports of sexual violence in eastern DRC are alarming. In North Kivu, the ongoing conflict has resulted in widespread rape and violence against women and girls as well as some boys and men.⁷⁵ For example, in the six month period between January 2013 and July 2013, 705 cases of sexual violence were registered by UNHCR in North Kivu including 619 reported cases of rape.⁷⁶ Of the total 705 cases of sexual violence, 434 were found to be committed by armed men; 288 of the survivors were minors and 43 were men.⁷⁷ UN figures indicate that reported cases of sexual violence in North Kivu increased from 4,689 cases in 2011 to 7,075 cases in 2012, although it is unclear whether this reflects a rise in attacks or reporting.⁷⁸ It is estimated that many more cases are not reported.⁷⁹ Statistics from 2010 revealed that about 1,100 cases of sexual violence are documented every month throughout DRC, amounting to an average of 36 victims a day.⁸⁰ Girls between the ages of 10 and 17 are most affected and about 10% of victims are less than 10 years old.⁸¹

The 2006 Constitution of DRC pledges national commitment to eliminating all forms of discrimination against women and toward contesting all forms of violence against women.⁸² In 2006, the DRC also passed a law introducing amendments on to the Penal Code to provide protection against sexual violence.⁸³ The amendment raised the age of

⁷⁵ Wakabi W, "Sexual violence increasing in Democratic Republic of Congo," *Lancet* no.37 (2008): pp 15-16

⁷⁶ UN News Center. "New UN statistics show alarming rise in rapes in strife-torn eastern DR Congo". (30 July 2013). <http://www.un.org/apps/news/story.asp?NewsID=45529#.U3kA7vldUvk>.

⁷⁷ Ibid.

⁷⁸ Ibid.

⁷⁹ Ibid.

⁸⁰ Annie Matundu Mbambi, Marie-Claire Faray-Kele, Women's International League of Peace and Freedom UK. *Gender Inequality and Social Institutions in the DRC*, April – December 2010.

http://www.peacewomen.org/assets/file/Resources/NGO/hrinst_genderinequalityinthedrc_wilpf_december2010english.pdf.

⁸¹ Ibid.

⁸² Immigration and Refugee Board of Canada, Democratic Republic of the Congo: Domestic and Sexual Violence, including Legislation, State Protection, and Services Available to Victims. 17 April 2012.

<http://www.refworld.org/docid/4f9e5e532.html>.

⁸³ Ibid.

consent to 18 and set a penalty for sexual assault ranging from 5-20 years in prison.⁸⁴ The DRC openly recognized the existence of physical and emotional domestic abuse in both its sixth and seventh periodic report to the UN Committee on the Elimination of Discrimination against Women in 2011.⁸⁵ However, no legislation currently stands against domestic violence and spousal rape.⁸⁶

Despite legislation in place to outlaw GBV, judicial inaction continues to allow these acts to occur without reprisal. Police and magistrates within the court system are often hesitant to pursue cases involving influential people and suspects can easily bribe court officials.⁸⁷ Further, the 2006 amendment to the Penal Code aimed to increase legal action against sexual violence, yet the law clashes with cultural norms and customary law.⁸⁸ Indeed, less than one in three reported GBV cases presented to law-enforcement in North Kivu were investigated due to gaps in the legal system.⁸⁹

5.7.2 Service delivery

Selected essential elements of clinical management of rape (CMoR) survivors included the provision of post-exposure prophylaxis (PEP), emergency contraception (EC), provision of antibiotics for presumptive treatment of STIs, and the availability of staff trained in CMoR. Comprehensive CMoR includes additional supplies and activities.⁹⁰ Table 20 outlines the number of facilities that had at least one trained staff person in place, had provided EC and PEP in the previous three months, and had these drugs available at the time of the assessment. Few health facilities are equipped to provide adequate CMoR: the hospital and two health centers.

⁸⁴ “Behind Bars for Rape,” *IRIN*, 07 July, 2010. <http://www.irinnews.org/report/89761/drc-behind-bars-for-rape>.

⁸⁵ Immigration and Refugee Board of Canada, Democratic Republic of the Congo: Domestic and Sexual Violence, including Legislation, State Protection, and Services Available to Victims. 17 April 2012. <http://www.refworld.org/docid/4f9e5e532.html>.

⁸⁶ Ibid.

⁸⁷ “Analysis: New Laws have Little Impact on Sexual Violence in DRC,” *IRIN Africa*, 07 June 2011. <http://www.irinnews.org/report/92925/analysis-new-laws-have-little-impact-on-sexual-violence-in-drc>.

⁸⁸ Ibid.

⁸⁹ Ibid.

⁹⁰ For more information on CMoR, see: WHO, UNHCR. *Clinical Management of Rape Survivors: Developing Protocols for Use with Refugees and Internally Displaced Persons*, 2004. <http://whqlibdoc.who.int/publications/2004/924159263X.pdf>.

Table 20. Selected elements of CMoR (n=26)		
	Hospital (n=1)	Health center (n=25)
At least 1 provider able to provide CMoR	1	18 (72%)
Post-exposure prophylaxis (PEP) (supplies available and provided in the previous 3 months)	1	10 (40%) ND* (1)
Emergency contraception (EC) (supplies available and provided in the previous 3 months)	1	12 (48%)
Antibiotics to prevent sexually transmitted infections (STIs) (supplies available and provided in the previous 3 months)	1	2 (8%)
Facilities with essential drugs and ≥1 qualified staff for CMoR	1	2 (8%)

As evident in Table 21, lack of supplies was a significant barrier to providing CMoR. Of the health facilities, 20 (80%) had provided antibiotics for STIs in the previous three months yet only (8%) had them available at the time of the assessment. For PEP and EC, 17 (68%) health facilities had provided it for CMoR in the three months prior, but only 10 (40%) and 12 (48%) had it available at the time to study took place. (See Table A20 in Appendix for further details.)

Table 21. Essential drugs for CMoR provided & reasons not provided (n=26)						
<i>Function</i>	Post-exposure prophylaxis (PEP)		Emergency contraception (EC)		Antibiotics for STIs	
	Hosp	HC	Hosp	HC	Hosp	HC
Provided in last 3 months (self-reported)	1	17 (68%)	1	17 (68%)	1	20 (80%)
Provided in the past 3 months (clients noted in registers)	1	13 (59.1%)	1	12 (54.5%)		
Main reason service not provided						
Lack of skilled staff/training		4 (57.1%)		4 (57.1%)		1 (20%)
Lack of supplies / equipment		6 (85.7%)		6 (85.7%)		4 (80%)
Not authorized to provide		1 (14.3%)		1 (14.3%)		1 (20%)

5.7.3 Provider knowledge and attitudes

Of the 13 health providers who filled out a questionnaire for this assessment, nine indicated that they had provided CMoR in the three months prior to the study and 10 providers reported that they had received training in CMoR. (See Appendix B). Nine health providers also stated that they had provided EC following a case of sexual violence in the previous three months while 13 had been trained to do so. However,

when asked to list key functions for CMoR, on average health providers were able to list only approximately five of 11 services.

5.7.4 Focus group discussions

Participants in all FGDs said that violence against women, both physical and sexual, is frequent. Physical and sexual violence takes place within and outside of the home. Examples of domestic violence cited include husbands beating them up, tearing up their clothes, and raping them if they refuse to have sex. Focus group participants said that women and girls outside of the home are particularly at risk of sexual violence when traveling in areas where armed groups or the military operate. They are also at risk generally, particularly in fields, pastures and forests or where women go to gather food or firewood. The Lushebere and Mungote focus groups of married women indicated that they no longer go to these places for fear of being raped. Perpetrators of sexual violence against women outside their home are mostly armed men (military, rebels, deserters, bandits), but also other groups such as single men, loggers, shepherds, and field owners.

All focus groups expressed that men could be “seduced against their will” by single women in an effort to get pregnant, which may result in an unwanted marriage for the man. They also acknowledged that men can be raped by other men.

According to the FGDs, the women most at risk of sexual violence include: young women and/or women who are attractive because they “take care of themselves” or who “walk around half naked;” women who go to, or live in, “dangerous places”; women living alone (unmarried women and women with children); destitute women; and women who sell sex. The unmarried women of the Kalinga and Kilimani focus groups indicated that women below 30 years of age are more at risk.

The unmarried women FGDs said that girls or women who dress inappropriately are to blame for an assault. Unmarried women of the Kilimani Camp focus group specified that when women who are sexually assaulted inside the camp are at fault for the attack but not when they are outside.

All of the FGDs stated that there are no services for rape survivors within the camps and mentioned health centers and the hospital as the places to receive care. Unmarried men of the Kalinga and Kilimani focus groups reported that CMoR is available at Masisi hospital but that it is over an hour away by foot. Married women of Mungote Camp

mentioned that many women utilize service at the Masisi hospital because they are “good and confidential.” Married men of the Masisi host community said the hospital had CMoR services and knew that it was important to go within 72 hours in order to prevent STI and HIV transmission as well as to receive trauma counseling. Most of the unmarried women FGDs knew of women who had used these services but stressed that some women did not seek services due to ignorance, shame or fear of mockery, stigmatization, and discrimination. Married and unmarried men FGDs added that married women may not seek services as they are afraid of being rejected by their husbands. Only the Kilimani Camp focus group of unmarried women said that raped women can continue living normally. The importance of confidentiality in CMoR services was mentioned by all FGDs and they were concerned about the quality of available care.

Focus groups recognized that commercial sex was occurring and considered it a negative practice. All FGDs indicated that many women exchange sex for food, money, or other goods. All FGDs disapproved of this practice when it is motivated by personal greed, but found it understandable when it is driven by scarcity of food and hunger, particularly when it affects their children. They stated that “Le fautif, c’est le ventre”—which literally translates to “The culprit is the stomach.” Indeed, when asked about their main health issues, IDPs reported malnutrition and lack of food as their primary concern. Single women with children or whose husbands have no income are viewed as a particularly vulnerable to engaging in commercial sex.

6. Discussion

6.1 Health coverage

The health facilities in Masisi Health Zone are struggling to meet the needs of the surrounding population. The benchmarks outlined by the IASC’s *Health Cluster Guide: A Practical Guide for Country-Level Implementation of the Health Cluster* (2009) state that at least one hospital per 250,000 people and one health center per 50,000 people should be in place to meet the health needs of the population.⁹¹ Ten inpatient and maternity beds should be available for every 10,000 people.⁹² However, the hospital catchment population is 378,000, serving 128,000 people more than the minimum standard, and has ten beds per 22,100 people. Although there are technically enough

⁹¹ Inter-Agency Standing Committee (IASC) Global Health Cluster, *Health Cluster Guide: A Practical Guide for Country-Level Implementation of the Health Cluster*. 2009. p. 173

⁹² Ibid.

health centers in place, they average ten beds per 16,080 people. Health facilities are operating beyond capacity and require additional beds and support to meet the demand for health services.

6.2 UN/NGO support

Health facilities that receive funding from international partners are able to provide care for free. Unsupported facilities, however, charge for services, creating significant financial barriers for poor communities. The extent to which a health facility provides RH services to its catchment area/population (IDPs and local population) is conditioned by the human resources, equipment, and financial resources available and, given the minimal support from the MoH, whether or not it receives support from an international NGO. Even when a facility receives funding, the extent of an NGO's support is determined by its priorities, capacities, and resources and it usually does not cover the entire range of services.

Findings show that the hospital received funding for all RH components, whereas funding for health centers was variable with less funding received for PAC, STIs/HIV, and GBV. Cross-tabulation of service availability with funding received demonstrated that even if a health facility obtained support for a specific RH area, this did not translate to service availability. For example, although 15 (60%) health centers received funding for BEmONC, none qualified as a functioning service delivery point. Twelve (48%) health centers received funding for GBV, but only two had essential drugs and staff available. Twelve (48%) health centers also received funding for HIV and other STI services; STI availability was limited and no health center provided adequate PMTCT. For FP, 17 (68%) received funding yet only two qualified as functioning FP service delivery points. Although further details were not probed, these findings may reflect the need for both additional funding as well as additional support—such as capacity building—beyond financial assistance.

6.3 General infrastructure and infection prevention

Years of conflict has decimated the health infrastructure in eastern DRC. While findings demonstrate that the hospital is fully functional, less than half of health centers report a functioning power supply and only 56% of health centers have access to a reliable water source, rendering these health centers unable to provide care safely. It is essential for all facilities to maintain adequate water supply to prevent the spread of disease and minimize risk of infection. A consistently functioning power supply—and a

back-up power system for the hospital—are critical for the provision of good quality RH services.

Five to thirty percent of patients may develop one or more infections during a hospital stay; in crisis settings; the number of infections worsens.⁹³ Low compliance of hand hygiene, lack of supplies, and misuse of equipment contribute to high infection rates and can undercut the delivery of safe RH services. For example, sepsis, which can result from poor infection control, is the second leading cause of maternal death in DRC.⁹⁴ When proper infection prevention procedures and supplies are in place, such as an effective waste management system and availability of a washing station, the risk of sepsis or infection to mothers or newborns is reduced.

6.4 Family planning

Access to FP methods offers individuals and couples the agency to decide the spacing and timing of pregnancies. A woman's ability to choose how and when to space or limit births is directly related to her health and well-being.⁹⁵ Family planning methods have the potential to prevent 32% of all maternal deaths and about 10% of childhood deaths in addition to decreasing rates of poverty and hunger that a family may experience.⁹⁶ In DRC overall, among married or partnered women ages 15 to 49, only 5% use a modern family planning method and an estimated 24% have an unmet need for contraception.⁹⁷

Family planning is an essential component of comprehensive RH care. Ensuring the availability of contraceptives is also an important addition to the Minimum Initial Service Package (MISP), which outlines the minimum standards in RH programming in emergencies.⁹⁸ In humanitarian settings, some women will want to continue to use a contraceptive method, or to begin a contraception method, particularly given the instability of the situation.

⁹³ World Health Organization (WHO), *Essential Environmental Health Standards in Health Care*, 2008.
http://www.who.int/water_sanitation_health/hygiene/settings/ehs_health_care.pdf

⁹⁴ Democratic Republic of the Congo Ministry of Health, *Programme National de Sante de la Reproduction: Politique Nationale et Plan Directeur de Developpement de la Santé de la Reproduction*. 2004.

⁹⁵ Inter-agency Field Manual on Reproductive Health in Humanitarian Settings. 2010.
<http://www.iawg.net/IAFM%202010.pdf>.

⁹⁶ Ibid.

⁹⁷ Democratic Republic of the Congo, National Institute of Statistics/ UNICEF, *Enquête par Grappes à Indicateurs Multiples en République Démocratique du Congo: 2010 Synthesis Report*, May 2011.

⁹⁸ Ibid.

This study found critical gaps in the availability of FP services. Only one-fifth of the health centers assessed met the criteria of a functioning FP service delivery point. Availability of long-acting methods was particularly limited as well as lack of EC for family planning specifically (whereas EC for CMoR was more available.). Where services were not provided, lack of supplies and skilled staff were identified as the main barriers to delivery. Further, focus groups revealed widespread misconceptions and cultural barriers that undermined accessing FP services. Focus groups generally did not know about EC for preventing pregnancy after sexual intercourse, for example. Although some outreach by CHWs was happening, it needs scaling up and few, if any, health centers provided IEC material. Some key informants noted facilities managed by the Catholic Church were particularly reluctant to offer FP services.

These findings reflect, among other things, the limited attention given to FP at the national level. Although the policy environment supports FP, the government has been unable to effectively implement the national strategies with a FP component. Except for salaries, the government provides little operational support for FP. Contraceptive procurement is 100% donor dependent. Since FP is implicitly assumed to be one of the components of primary health care (*Soins de Santé Primaire*) in the PMA, it does not receive any particular attention as such, despite the fact that the health authorities of North Kivu are aware that “currently no health area has a health center with a full PMA, [and] the PMA components missing in most Health Centres are [among others] post-natal care, FP and PTMCT.”⁹⁹ This has prompted a few NGOs, such as Save the Children, to set up a special program to reinforce FP at the health center level. However, more targeted attention to FP is needed, in particular commodity management and security and training and supervision of staff. Focus groups demonstrate that community engagement—rather than awareness-raising alone—is needed to encourage utilization of services.

6.5 Emergency obstetric and newborn care

An estimated one in seven pregnant women will experience a complication during pregnancy or childbirth, and at least 5% of pregnant women will require a caesarian section to deliver safely.¹⁰⁰ In addition, 9% to 15% of newborns will require emergency

⁹⁹ Democratic Republic of Congo Ministry of Health. *Plan Provincial de Développement Sanitaire du Nord Kivu 2011–2015*. February 2010. p. 38

¹⁰⁰ Inter-agency Field Manual on Reproductive Health in Humanitarian Settings. 2010. <http://www.iawg.net/IAFM%202010.pdf>.

care.¹⁰¹ In DRC, the lifetime risk of maternal death is one in 24, among the highest in the world.¹⁰² Neonatal mortality comprises 26% of under-5 mortality.¹⁰³ DRC has only two trained midwives per 1,000 live births.¹⁰⁴

Good quality EmONC services help reduce death and disability from complications of pregnancy and childbirth. Most maternal deaths result from hemorrhage, complications of unsafe abortion, pregnancy-induced hypertension, sepsis and obstructed labor.¹⁰⁵ All of these causes are treatable given access to skilled health care providers with sufficient resources.¹⁰⁶ Many maternal deaths result from "three delays": delays in *deciding* to seek care on the part of the woman, her family, her community, and/or local health workers; delays in *accessing* a facility that provides EmONC, often due to lack of transport or poor road conditions; and delays in *receiving* good quality care at the facility as a result of absent staff, unsanitary conditions, or lack of drugs and supplies.¹⁰⁷

Minimum standards in RH service provision include the availability and accessibility of health facilities to provide BEmONC and hospitals to provide CEmONC 24 hours a day, 7 days a week.¹⁰⁸

Findings from Masisi Health Zone demonstrate that adequate EmONC is a significant and critical gap. None of the health centers met the criteria as a functioning BEmONC service delivery point, and the hospital did not provide all the signal functions for CEmONC (due to lack of supplies for safe blood transfusion). Data show that a quarter of health centers did not have an on-site or on-call provider during nights and weekends to provide BEmONC services. Health care providers reported a dearth of drugs as well as lack of authorization to provide assisted vaginal delivery as barriers to providing signal functions. Essential elements of newborn care were available at the hospital but not at any health centers reportedly due to lack of drugs and absence of trained staff.

¹⁰¹ Ibid.

¹⁰² UNFPA, *State of the World's Midwifery*. 2011.

http://www.unfpa.org/sowmy/resources/docs/country_info/profile/en_DRC_SoWMy_Profile.pdf.

¹⁰³ Ibid.

¹⁰⁴ Ibid.

¹⁰⁵ World Health Organization (WHO), *Managing Complications in Pregnancy and Childbirth: A Guide for Midwives and Doctors*, 2000. <http://www.who.int/reproductive-health/impac/Introduction.html>.

¹⁰⁶ Ibid.

¹⁰⁷ Thaddeus S, Maine D, "Too Far to Walk: Maternal Mortality in Context." *Social Science and Medicine*, no. 38 (1994): pp. 1091-1110

¹⁰⁸ Inter-Agency Working Group on Reproductive Health in Crisis. Minimum Initial Service Package for Reproductive Health in Crisis Situations. p. 47.

These findings are alarming, particularly given the high fertility rate in DRC where women have, on average, 6.3 children in their lifetime.¹⁰⁹

Referral systems for obstetric emergencies also have challenges including limited or poor communication and transport systems. MSF-Belgium and Save the Children have made progress in addressing this in the facilities they support, yet other facilities need help. Some focus groups also reported lack of access to health facilities due to distance, absence of transport, or poor roads. Functioning referral systems are essential for women to access life-saving EmONC services. Informants also identified malnutrition as one of their primary health problems, which increases pregnant women's risk of delivering low-birth weight infants.¹¹⁰

Emergency obstetric and newborn care needs urgent addressing. Health facilities need additional support to provide these critical services, including a sustainable supply chain, trained staff, functioning referral systems, and clear protocols on service delivery. Strengthening food security would also benefit maternal and newborn health. Further, financial barriers need to be addressed: a caesarean section in DRC costs around £80 (USD 135), which, when compared to GDP per capita in the UK, translated into approximately £10,000.¹¹¹

On a positive note, the FGDs revealed significant changes in knowledge and behaviors regarding facility births, which have now become a norm. Efforts by camp leaders, community health workers, and sensitization campaigns contributed to these improvements. Groups reported that the State had circulated instructions to community leaders that one of their roles was to sensitize pregnant women to seek antenatal and delivery care at a health facility. These efforts and resulting impact are extremely impressive. They provide evidence for the importance of a multi-pronged outreach approach and sustained community engagement in increasing uptake of life-saving RH services. This change in norms and behaviors may also reflect DRC's national

¹⁰⁹ Democratic Republic of the Congo, National Institute of Statistics/ UNICEF, *Enquête par Grappes à Indicateurs Multiples en République Démocratique du Congo: 2010 Synthesis Report*, May 2011. p.15

¹¹⁰ Ververs, M. T., Antierens, A., Sackl, A., Staderini, N., & Captier, V. "Which anthropometric indicators identify a pregnant woman as acutely malnourished and predict adverse birth outcomes in the humanitarian context?" *PLoS Currents*, no. 5 (2012): pp. 939-942.

¹¹¹ United Kingdom Department for International Development (DFID). *Access to Health Care in the Democratic Republic of Congo - Business Case and Intervention Summary*.

commitment to increase the proportion of deliveries assisted by a skilled birth attendant to 80% as part of the *Every Woman Every Child* global movement launched in 2010.¹¹²

6.6 Comprehensive abortion care

The World Health Organization estimates that 42 million pregnancies result in induced abortions every year; of these, roughly 20 million are unsafe.¹¹³ Safe, comprehensive abortion services—which includes PAC and induced abortion—are life-saving interventions. Globally, an estimated 80,000 maternal deaths result from unsafe abortion per year. In DRC, unsafe abortion causes 13% of maternal deaths.¹¹⁴ The high fertility rate, low contraceptive prevalence, lack of comprehensive abortion services, and limited of access to EmONC contribute to the high numbers of unsafe abortion in DRC. Although restricted, abortion is permitted in cases when the woman's life is in danger.¹¹⁵ Access to PAC and safe induced abortion—to the extent of the law—is essential for women in DRC.

Comprehensive safe abortion care is a key component of RH service provision and is included in the 2010 version of the *Inter-agency Field Manual on Reproductive Health in Humanitarian Settings*. World Health Organization (2012) guidance is available in *Safe abortion: technical and policy guidance for health systems*. Despite this, provision of comprehensive abortion care has—in general—been neglected by humanitarian actors.¹¹⁶

The health facility assessments found that abortion was not available at any facilities, yet three health providers reported on their questionnaires that they had performed induced abortion in the previous three months. Since the questionnaires were confidential, these claims could not be confirmed. Restrictive national policies as well as providers' lack of knowledge of supportive policies and protocols prevents women from accessing life-saving abortion services. Multiple barriers were cited: lack of authorization,

¹¹² World Health Organization (WHO). *Accountability for Women's and Children's Health: DRC*. http://www.who.int/woman_child_accountability/countries/cod/en/

¹¹³ IAWG. *Inter-agency Field Manual on Reproductive Health in Humanitarian Settings*. 2010. <http://www.iawg.net/IAFM%202010.pdf>.

¹¹⁴ Democratic Republic of the Congo Ministry of Health, *Programme National de Sante de la Reproduction: Politique Nationale et Plan Directeur de Developpement de la Santé de la Reproduction*. 2004.

¹¹⁵ World Abortion Laws. 2013. <http://worldabortionlaws.com/>.

¹¹⁶ C.f.: Therese McGinn, Routledge Handbook of Global Public Health: Reducing death and disability from unsafe abortion. 2011. pp. 191-198. Nguyen-Toan Tran, Angela Dawson, Janet Meyers, Sandra Krause, Carina Hickling, Developing institutional capacity for reproductive health in humanitarian settings: a descriptive study. *Conflict and Health*. Submitted manuscript. Sam Guy, Meaningful change or business as usual? Reproductive health in humanitarian settings. *Forced Migration Review* 2013, <http://www.fmreview.org/25th-anniversary/guy>.

few trained providers, and limited equipment and supplies. The assessment also found that the hospital met the criteria of a PAC service delivery point. Yet less than half (11) of the health centers assessed were able to adequately provide this service although PAC should be available at the health center level. Lack of essential equipment was reported as the key gap.

Focus groups strongly opposed abortion and referenced their Catholic beliefs. Women who resort to unsafe abortion face stigma. Save the Children had initiated some community information and education activities to address misconceptions around abortion, but far more effort is required to scale up service provision and raise awareness about women and girls' abortion rights within the legal framework.

6.7 HIV and other sexually transmitted infections

Factors that define a complex emergency such as conflict, social instability, poverty and decreased agency can aggravate populations' vulnerability to STIs including HIV. As such, prevention and treatment of HIV and other STIs transmission are key components of comprehensive RH care. Specific interventions to address HIV and other STIs are also included in the minimum, priority RH services outlined by the MISP. Specifically, minimum HIV and STI related activities include: availability of safe blood transfusion, respect for standard precautions, availability of free condoms as well as additional services including the syndromic treatment of STIs, ARVs for PLHIV, and PMTCT care for pregnant women.¹¹⁷ Comprehensive HIV and STI care includes further services, such as voluntary counseling and testing, comprehensive care for PLHIV, community interventions such as safe sex campaigns, and laboratory diagnosis of STIs.¹¹⁸ The *Plan National de la Lutte Contre le Sida* (National Plan to Fight Against AIDS) also outlines a comprehensive package of HIV prevention, treatment, and mitigation services and activities to be implemented in each Health Zone.

Findings show the hospital is able to adequately provide a range of STI and HIV services. However, additional support for health centers is needed to systematically implement the minimum HIV and STI services and build upon these to ensure comprehensive care is available.

¹¹⁷ IAWG. *Inter-agency Field Manual on Reproductive Health in Humanitarian Settings*. 2010. <http://www.iawg.net/IAFM%202010.pdf>.

¹¹⁸ Ibid.

The HIV-related findings are concerning. The HIV prevalence in North Kivu is 4.4%¹¹⁹—more than quadruple the national rate.¹²⁰ At the same time, only one health center reported the provision of ART drugs for PLHIV in the three previous months and none provided ARVs for PMTCT. Lack of drugs was identified as the primary gap to both HIV and STI service delivery; lack of trained staff was also identified, particularly for PMTCT.

Many people living with HIV in Masisi Health Zone are not able to access consistent treatment, putting them at risk of developing drug-resistant HIV or developing an AIDS-related illness. Care for HIV-positive children was lacking in particular. The absence of PMTCT puts newborns at risk for transmission and undermines broader prevention efforts. Antiretroviral medications must be accessible at the health center level, especially for HIV+ women who may not be able to reach the referral hospital for delivery. Currently, no treatment points for children have been established, and they must travel to Goma for care, a four-hour drive away. Yet some positive efforts were underway at the time of the assessment; MSF-Belgium, for example, was working with a number of health centers to scale up PMTCT and VCT efforts.

Among the IDP and host communities, widespread misconceptions about modes of transmission, dearth of knowledge of service availability, and lack of condom use require immediate attention. For example, FGDs revealed that some groups of unmarried women had never even heard of HIV or AIDS and that many married and unmarried men had not seen or used a condom before. Some respondents did not know that condoms could be obtained for free at the health center; those that did reported frequent stock outs. This is concerning given that the primary mode of transmission in DRC is sexual intercourse.¹²¹ In addition to scaling up health services, efforts must include community engagement such as education campaigns to minimize HIV transmission, address stigma, and ensure PLHIV receive the care they need.

6.8 Clinical management of rape (CMoR)

Extensive sexual violence, including gang rape and sexual slavery, has been documented in Eastern DRC.¹²² Consequences include traumatic fistula, unwanted

¹¹⁹ Peterman A, Palermo T, Bredenkamp C: “Estimates and determinants of sexual violence against women in the Democratic Republic of Congo,” *American Journal of Public Health* (2011): pp. 101.

¹²⁰ UNAIDS. *Report on the Global AIDS Epidemic*. 2013.

¹²¹ World Health Organization. *Democratic Republic of Congo: Summary Country Profile for HIV/AIDS Treatment Scale-up*. 2005. http://www.who.int/hiv/HIVCP_COD.pdf.

¹²² Wakabi W: Sexual violence increasing in Democratic Republic of Congo. *Lancet* 2008, 37:15-16.

pregnancies, HIV and STI transmission, as well as psychosocial morbidity. Sexual violence is often underreported. Even if women are not coming forward to report sexual violence, availability of good quality, confidential clinical care for survivors is imperative.

Essential components of medical care for post-rape treatment include: history and examination, provision of EC and PEP, preventative treatment of STIs, treatment of injuries, forensic evidence collection (as relevant), and referral for further services including psychosocial care.¹²³ A private consultation area, locked file cabinet, clear protocols, trained providers, trained male and female translators, as well as community awareness-raising and a 24/7 referral system to the hospital for life-threatening complications are requisite for good quality care.¹²⁴

This assessment found that health facilities require assistance to ensure that quality CMoR is in place at all times. The majority of health centers lacked a consistent, sustainable supply of essential drugs for CMoR. Indeed, the large majority had provided all three drugs—antibiotics, EC, and PEP in the previous three months—yet only two health centers and the hospital had the essential drugs and staff at the time of the assessment. This demonstrates that efforts to provide CMoR are underway and health facilities in Masisi Health Zone are providing key elements of CMoR, but commodity insecurity results in ad hoc care. Provider questionnaires demonstrated that—although the majority of health facilities have trained staff—knowledge gaps may also obstruct the provision of quality CMoR.

Focus groups revealed that many people knew about the existing services and the importance of coming forward to receive care within 72 hours after the attack (the window period for PEP). This is a marked difference from other emergencies where many crisis-affected communities are neither aware of the availability of post-rape services nor the reasons why they should seek care.¹²⁵ Yet focus groups reported that—even with this knowledge—most rape victims do not access services due to shame, fear of social sanctions, and mistrust in the quality and confidentiality of

Steiner B, Benner MT, Sondorp E, Schmitz KP, Mesmer U, Rosenberger S: Sexual violence in the protracted conflict of DRC programming for rape survivors in South Kivu. *Conflict and Health*, 2009, 3:1-9. Bartels SA, Scott JA, Mukwege D, Lipton RI, VanRooyen MJ, Leaning J: Research patterns of sexual violence in Eastern Democratic Republic of Congo: reports from survivors presenting to Panzi Hospital in 2006. *Conflict and Health* 2010, 4:9.

¹²³ IAWG. *Inter-agency Field Manual on Reproductive Health in Humanitarian Settings*. 2010. <http://www.iawg.net/IAFM%202010.pdf>.

¹²⁴ Ibid.

¹²⁵ C.f., *Priority Reproductive Health Activities in Haiti: An Inter-Agency MISP Assessment* (2011), *Reproductive Health Services for Syrian Refugees in Zaatri Refugee Camp and Irbid City, Jordan: An Evaluation of the Minimum Initial Service Package* (2013).

available services. These findings are important for health actors to understand that awareness of the availability and benefits of accessing post-rape services will not necessarily increase utilization. Additional efforts to engage communities and enhance quality of care are necessary to ensure rape survivors access life-saving services.

6.1.8 Adolescents

Adolescent RH indicators in North Kivu are poor. According to the 2010 MICS, the adolescent fertility rate in North Kivu is 132 per 1,000 girls between 15-19 years.¹²⁶ Among women between the ages of 15-49, 44% indicated they were first married by the age 15 in North Kivu.¹²⁷ Additionally, of the 27% of women ages 15-24 years in North Kivu who stated that they have sex with casual partners, only nine percent reported using a condom the last time they had sex.¹²⁸ Further, girls between the ages of 10 and 17 are most affected by sexual violence.¹²⁹

Given these high RH needs, the findings regarding RH service delivery and knowledge and attitudes of adolescents toward RH are concerning. Although data were lacking for seven health centers and the hospital, the remaining facilities assessed did not have any staff trained in adolescent-friendly service provision. Further, FGDs revealed that young unmarried women were the least knowledgeable about RH service availability as well as RH generally. Indeed, some had never heard of HIV or AIDS before. Questionnaires indicated reluctance on the part of some providers to provide RH services to adolescents, such as FP. In order to meet the RH needs of adolescents, health facilities must address these issues including training and outreach to adolescents.

7. Conclusions and recommendations

The following includes broader suggestions for the MoH, UNFPA, and other health actors to inform RH programming. Recommendations per RH component are also outlined.

¹²⁶ Democratic Republic of the Congo, National Institute of Statistics/UNICEF. *Enquête par Grappes à Indicateurs Multiples en République Démocratique du Congo: 2010 Synthesis Report*, May 2011.

¹²⁷ Ibid.

¹²⁸ Ibid.

¹²⁹ Ibid.

Commodity security and management - Drug stock outs and insufficient supplies were major barriers in all areas of RH service provision. North Kivu Province and particularly Masisi Territory has a long rainy season of more than 9 months per year, which together with the activity of the armed groups and the bad condition of road networks represents a significant challenge in terms of logistics and accessibility to health facilities. In addition, health facilities that do not receive external support and entirely depend on the cost-recovery system often face supply stock-outs. Commodity security and management need urgent attention.

Recommendation: *The MoH and other health actors should undertake logistical audits to review protocols, forecast accuracy, budgetary constraints, storage conditions, and staff capacity, as well as ensure availability of funding to implement recommendations. Contingency stocks of RH supplies should be established or strengthened to prevent supply shortages.*

Capacity building - Lack of skilled providers also undermined provision of RH care. Primary training gaps included permanent FP methods, adolescent-friendly services, induced abortion, and PAC.

Recommendation: *The MoH and other health actors should strengthen staff capacity through competency-based training and refresher courses on RH and consistent coaching, guidance, and supervision to support and monitor technical improvement. Trainings should integrate non-technical skills such as situation awareness, critical decision-making, effective communication, and teamwork to increase patient safety and streamline service delivery. Trainings should be framed within a rights-based approach and address negative provider attitudes towards RH care, such as FP and abortion.*

Community engagement – Utilization of many RH services appeared low. This does not suggest that services are not wanted or needed, but indicates a need for community engagement and education. Many focus groups did not know RH services were in place. Further, even when they knew of the availability and benefits of services—such as post-rape treatment—they were reluctant to seek care due to shame, fear of stigmatization, and lack of trust in the confidentiality of services. This demonstrates that awareness-raising about the availability of services alone is insufficient. Conversely, significant success resulted from a large-scale campaign by the MoH and other health actors regarding the importance of facility-based delivery. Almost all focus groups reported that childbirth at home used to be the norm, but due to the outreach, most women now deliver in a health facility, reflecting an impressive and effective campaign.

Recommendation: *The MoH, UNFPA, and RH actors must systematically and meaningfully engage affected communities to increase access and demand for services. These efforts should be grounded in a rights-based approach, locally contextualized, and evidence-informed. For example, a proactive strategy to train, reinforce, and motivate community health workers (Relais Communautaires) to raise awareness about service availability, dispel misconceptions, and address concerns could be beneficial. Initiatives already in place to strengthen community health worker capacities could be built upon and expanded. Effective engagement with communities requires sensitivity to religious beliefs. In addition, information, education, and communication materials on RH should be made available at health facilities.*

RH coordination - A continuous coordination effort is needed to ensure the improvement and strengthening of RH services in IDP camps and sites as well as across Masisi Territory. Coordination mechanisms for the health and RH sectors have evolved in a very positive manner. The RH Working Group lead by UNFPA worked closely with the Health Cluster and provided a forum for discussion and prioritization of RH issues.

Recommendation: *UNFPA and RH Working Group members can strengthen the coordination mechanism by facilitating participation from other health actors, in particular local NGOs, as well as representatives from inter-agency protection working groups. UNFPA could consider disseminating and discussing the Inter-agency Field Manual on Reproductive Health in Humanitarian Settings (2010), if it has not already done so.*

Policies – Some gaps in RH care resulted from restrictive national policies as well as providers' lack of knowledge of supportive policies and protocols.

Recommendation. *Long-term advocacy to address policy barriers for comprehensive RH service provision is needed, particularly regarding induced abortion. RH should be integrated into DRR policies, and the MoH should disseminate information about existing policies and protocols to ensure providers are fully aware of national guidance.*

Adolescent-friendly services - Health facilities did not have user-friendly strategies in place to facilitate the utilization of RH services by adolescents. One of the barriers constraining the implementation of RH services for adolescents was the lack of trained staff and the reluctance of some service providers to offer these services to adolescents. Given the RH needs and vulnerabilities of adolescents in North Kivu, the

inadequacy of adolescents-friendly services is an issue that needs to be urgently addressed.

Recommendation: *DRC policy permits adolescents' access to family planning and other RH services. The development of a comprehensive, holistic strategy is required to facilitate their access. Health actors should consider: i) instructing, sensitizing and training service providers on adolescent rights, their RH needs, and how to provide adolescent-friendly services; ii) informing, educating and sensitizing the community to gain buy-in and trust from adults; iii) ensuring meaningful participation of adolescents in RH programming; iv) monitoring service usage through collection of sex-and age-disaggregated data; v) engaging peer educators and ensuring structured supervision, recognition, and mentorship; vi) ensuring adolescent-friendly RH services are responsive to needs of different sub-populations, such as married/unmarried adolescents, adolescents with disabilities, and in-school/out-of-school adolescents.*

Remuneration of health personnel - Only a minimal number of the health personnel in health structures receive salaries from the MoH. Risk premium and cost-recovery revenue are the only sources of income for the majority of health personnel, but these are insufficient to keep them motivated.

Recommendation: *High level advocacy is required to urge the Government of DRC to progressively increase the portion of the State budget to the health sector to bring it closer to the 15% target of the Abuja Declaration, in order to enable the MoH to provide the level of support required for health structures to implement the PMA and PCA and reliable salaries for health personnel at operational level.*

Financial barriers - The gratuity of health services and RH services in crisis areas such as Masisi depends on the level of external support to the health areas. Although many of the focus groups reported access to free services, health facilities that were not supported by international partners institute fees. This cost-recovery system represents a major economic barrier for the poor communities in Masisi.

Recommendation: *The MoH and donors should support equitable, sustainable funding to all health facilities in order to remove user fees. This would be an essential step to ensure universal access to health care, including to RH care. MoH and NGOs should consider other strategies, such as establishing community savings groups and income generation activities, to assist poorer communities to pay for critical services.*

NGO funding - The health infrastructure in Masisi relies heavily on the support of NGOs and other international agencies. They urgently require additional support to adequately scale up RH care.

Recommendation. Donors should prioritize and increase funding for NGOs providing RH and other essential services in eastern DRC.

Recommendations by RH area

In addition to the recommendations above, the MoH, UNFPA, and other health actors should:

- Family planning
 - Expand family planning service delivery points, with particular attention to provision of long-acting methods as well as EC following unprotected sex
 - Develop a community outreach strategy specifically for FP to facilitate uptake in services
 - Address negative provider attitudes and frame FP service provision within a rights-based approach
- EmONC
 - Scale up BEmONC services among health centers (through commodity security and competency-based training as described above) and monitor services using the UN Process Indicators
 - Address transportation barriers for pregnant women to access health facilities, such as exploring alternative transportation options
 - Ensure 24/7 referral services are in place
 - Strengthen newborn care by training health center staff in standard newborn care practices and through home visits by community health workers trained in standard newborn care practices
- Comprehensive abortion care
 - Liaise with WHO to develop a comprehensive strategy to address the implementation of safe abortion services, including dissemination of information on legal indications to health providers, staff training, and identifying and addressing authorization barriers
 - Train and re-train staff in PAC including PAC with misoprostol
- HIV and STI care
 - Scale up efforts to implement the complete package of activities and services as outlined in the *Plan National de la Lutte Contre le Sida*
 - Expand treatment points, including at least one treatment point for children
 - Ensure consistent availability of condoms at all health facilities and increase number of free distribution points including mobile clinics

- Conduct condom campaign (ensure religious issues are addressed) and reach out to vulnerable groups, such as sex workers; consider innovative social marketing strategies and identify and learn from other successful campaigns
- Develop strategy to scale up PMTCT (if not yet developed), and ensure the integration of all elements of PMTCT activities into the PMA in at least five health facilities in the Masisi Health Zone (as per the indicator of integration)
- Explore using nutrition as an entry point to link malnutrition support with HIV interventions
- Address stigma, lack of awareness, and misconceptions among communities
- Care for rape survivors
 - Ensure availability of good quality comprehensive care for rape survivors, including referral to psychosocial care and legal services, as appropriate
 - Provide clear protocols on CMoR to health staff
 - Inform health workers, including Community Health Workers, on the availability and location of CMoR services
 - Address authorization barriers
 - Train/re-train staff in quality of care and importance of confidentiality
 - Identify and work with partners (such as the GBV Sub-Cluster) to implement successful strategies to address stigma and misconceptions among communities regarding accessing post-rape treatment

8. References

African Development Fund. *Social Development Department-Central and West Regions. Appraisal Report : The Health Project I-Eastern Province Healthcare Development Master Plan Support: Democratic Republic of Congo*. December 2003. <http://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/CD-2004-011-EN-ADF-BD-WP-DRC-AR-HEALTH-I.PDF>.

“Analysis: New Laws have Little Impact on Sexual Violence in DRC,” *IRIN Africa*, 07 June 2011. <http://www.irinnews.org/report/92925/analysis-new-laws-have-little-impact-on-sexual-violence-in-drc>.

Annie Matundu Mbambi, Marie-Claire Faray-Kele, Women’s International League of Peace and Freedom UK. *Gender Inequality and Social Institutions in the DRC*, April – December 2010. http://www.peacewomen.org/assets/file/Resources/NGO/hrinst_genderinequalityinthedrc_wilpf_december2010english.pdf.

Association Régionale D’Approvisionnement en Médicaments Essentiels. <http://www.asrames.com/en/>.

“Behind Bars for Rape,” *IRIN*, 07 July, 2010. <http://www.irinnews.org/report/89761/drc-behind-bars-for-rape>.

Black Robert E, et al. "Global, Regional, and National Causes of Child Mortality in 2008: a Systematic Analysis". *The Lancet*. 375, no. 9730. June 5, 2010.

CIA World Factbook. 2010. http://www.maternalmortalitydata.org/inner.html?country_selection=O.

Democratic Republic of the Congo, National Institute of Statistics/UNICEF. *Enquête par Grappes à Indicateurs Multiples en République Démocratique du Congo: 2010 Synthesis Report*, May 2011.

Democratic Republic of Congo Ministry of Health. *Atlas De La République Démocratique Du Congo Sur Les Indicateurs Du Vih/sida: Basé Sur Les Résultats De L'enquête Démographique Et De Santé En RDC, EDS-RDC 2007*. 2008.

_____. *Costing et Planification de Ressources des Services de Santé dans le Cadre de la Mise en œuvre de la Stratégie de Renforcement du Système de Santé*. August 2008.

_____. Department of Family Planning, *Plan Stratégique National à vision multisectorielle (2014-2020)*. 2014.

- _____. *Health System Strengthening Strategy*. 2006.
http://www.minisanterdc.cd/Articles/srss/srss_rdc_web_en.pdf.
- _____. *Plan d'Action Consolidé de la Province Sanitaire du Nord Kivu*. 2013.
- _____. *Plan Provincial de Développement Sanitaire du Nord Kivu 2011–2015*. February 2010.
- _____. *Plan Stratégique de lutte contre le HIV et le SIDA 2008 – 2012*. June 2008.
http://www.nationalplanningcycles.org/sites/default/files/country_docs/Democratic%20Republic%20of%20Congo/pnds_2011-2015.pdf
- _____. *Programme National de Sante de la Reproduction: Politique Nationale et Plan Directeur de Developpement de la Santé de la Reproduction*. 2004.
- _____. *Recueil des Normes d'Organisation et de Fonctionnement de la Zone de Santé*. Septembre 2009.
- Immigration and Refugee Board of Canada, Democratic Republic of the Congo: Domestic and Sexual Violence, including Legislation, State Protection, and Services Available to Victims. 17 April 2012. <http://www.refworld.org/docid/4f9e5e532.html>.
- Inter-agency Field Manual on Reproductive Health in Humanitarian Settings. 2010.
<http://www.iawg.net/IAFM%202010.pdf>.
- Inter-Agency Working Group on Reproductive Health in Crisis. About IAWG (2013).
<http://iawg.net/about-iawg/>.
- _____. Minimum Initial Service Package for Reproductive Health in Crisis Situations.
<http://misp.rhrc.org/>.
- International Planned Parenthood Federation. *SPRINT, Essential Services in Crisis Situations*. <http://www.ippf.org/our-work/what-we-do/humanitarian/sprint-essential-services-crisis-situations>
- Kalonda, J. C. O. « Violence sexuelle au Congo-Kinshasa: nécessité de la dépénalisation de l'avortement, ». *Rev Med Brux*, no. 33 (2012): 482-486.
- Kayembe, P. K., Fatuma, A. B., Mapatano, M. A., & Mambu, T. "Prevalence and determinants of the use of modern contraceptive methods in Kinshasa, Democratic Republic of Congo," *Contraception*, 74, no.5 (2006): pp. 400-406.
- Kisindja, R.M., Benfield, N. Wright, M. " M156 Induced abortion in Eastern Democratic Republic of Congo – A descriptive study," *International Journal of Gynecology and Obstetrics*, vol. 119 S583 (2012).

Lussy J. Paluku ; Langelibalele H. Mabuza ; Patrick M.h. Maduna ; John V. Ndimande. "Knowledge and attitude of schoolgirls about illegal abortions in Goma, Democratic Republic of Congo," *African Journal of Primary Health Care and Family Medicine* v. 2.1 (2010).

McDowell, Steve. UNICEF DRC/CARE DRC. *Internal Displacement in North Kivu: Hosting, Camps, and Coping Mechanisms*. April 27, 2008.

Médecins Sans Frontières (MSF). "Democratic Republic of Congo: Condition Still Critical." (2011). <http://www.msf.org/article/dEmONCratic-republic-congo-condition-still-critical>.

Peterman A, Palermo T, Bredenkamp C: "Estimates and determinants of sexual violence against women in the Democratic Republic of Congo," *American Journal of Public Health* (2011): pp. 101.

OCHA. *Factsheet, Democratic Republic of the Congo: Internally displaced people and returnees*. December 2013.
http://reliefweb.int/sites/reliefweb.int/files/resources/RDC%20Factsheet_Mouvement%20de%20population_english_Dec2013.pdf, last accessed June 10, 2013.

_____. *Mid-Year Review of the Humanitarian Action Plan*. July 2013.

_____. *Nord-Kivu: Situation des Personnes Déplacées Internes (PDI) au 25 Mars 2013*. April 10, 2013.

Population Action International. *Unsafe Abortion – Facts and Figures*.
<http://populationaction.org/wp-content/uploads/2013/12/UnsafeAbortion.pdf>.

Save the Children. *State of the World's Mother's Report*. May 2013.
http://www.savethechildren.org/atf/cf/%7B9def2ebe-10ae-432c-9bd0-df91d2eba74a%7D/SOWM-FULL-REPORT_2013.PDF.

Stearns, Jason. *North Kivu: The Background to Conflict in North Kivu Province of Eastern Congo*. Rift Valley Institute/Usalama Project. 2012.
http://riftvalley.net/publication/north-kivu#.U5cuW_IdUvk.

Thaddeus S, Maine D, "Too Far to Walk: Maternal Mortality in Context." *Social Science and Medicine*, no. 38 (1994).

The Guttmacher Institute. *Facts on Abortion in Africa*. January 2012.
http://www.guttmacher.org/pubs/IB_AWW-Africa.pdf.

Tulane University. *Family Planning in the DRC*. <http://familyplanning-drc.net/political-documents-pertinent-to-family-planning.php>.

_____. *Family Planning in the DRC*. <http://planificationfamiliale-rdc.net/financement.php>.

UNAIDS. *Democratic Republic of the Congo, HIV and AIDS Estimates*. 2012.
<http://www.unaids.org/en/regionscountries/countries/democraticrepublicofthecongo/>.

_____. *Report on the Global AIDS Epidemic*. 2013.

UNDP. *Human Development Report 2013: Congo (Democratic Republic of the)*. 2013.
<http://hdr.undp.org/sites/default/files/Country-Profiles/COD.pdf>.

_____. *Province du Nord Kivu – Profil Résumé – Pauvreté et conditions de vie des ménages*; PNUD. March 2009.
http://www.cd.undp.org/content/dam/dem_rep_congo/docs/povred/UNDP-CD-Profil-PROVINCE-Nord-Kivu.pdf.

UNEP, *Water Issues in the Democratic Republic of the Congo: Challenges and Opportunities*, 2011.

Save the Children. *State of the World's Mother's Report*. May 2013.

UNICEF. *Democratic Republic of Congo*.
http://www.unicef.org/wcaro/Countries_1749.html

_____. *Enquête par Grappes à Indicateurs Multiples en République Démocratique du Congo: 2010 Synthesis Report*, May 2011.

UNFPA. *State of the World's Midwifery*. 2011.
http://www.unfpa.org/sowmy/resources/docs/country_info/profile/en_DRC_SoWMy_Profile.pdf.

_____. *State of the World Population 2013: Motherhood in Childhood: Facing the Challenge of Adolescent Pregnancy*. 2013.
<http://www.unfpa.org/webdav/site/global/shared/swp2013/EN-SWOP2013-final.pdf>.

UN News Center. "New UN statistics show alarming rise in rapes in strife-torn eastern DR Congo". (30 July 2013).
<http://www.un.org/apps/news/story.asp?NewsID=45529#.U3kA7vldUvk>.

United Kingdom Department for International Development (DFID). *Access to Health Care in the Democratic Republic of Congo - Business Case and Intervention Summary*. NB: the document concerns a five-year programme to be implemented from early 2013 to March 2018.

USAID/ Democratic Republic of Congo Ministry of Health, *Comptes nationaux de la santé 2008 – 2009*. May 2011.

USAID/PEPFAR. *The Debilitating Cycle of HIV, Food Insecurity, and Malnutrition*, 2012. http://www.aidstar-one.com/sites/default/files/AIDSTAR_FSN_IP.pdf.

Ververs, M. T., Antierens, A., Sackl, A., Staderini, N., & Captier, V. “Which anthropometric indicators identify a pregnant woman as acutely malnourished and predict adverse birth outcomes in the humanitarian context?”. *PLoS Currents*, no. 5 (2012): pp. 939-942.

Wakabi W, “Sexual violence increasing in Democratic Republic of Congo,” *Lancet* no.37 (2008): pp 15-16

World Abortion Laws. 2013. <http://worldabortionlaws.com/>.

World Bank, 2012. <http://www.worldbank.org/en/country/drc>.

_____. PovCalNet, 2009. <http://research.worldbank.org/PovcalNet/povcalSvy.html>.

_____. 2010. World Development Indicators. Washington DC.

WHO, UNFPA, UNICEF, AMDD. *Monitoring Emergency Obstetric Care: A Handbook*. 2009.

WHO/UNHCR. *Clinical Management of Rape Survivors: Developing Protocols for Use with Refugees and Internally Displaced Persons*, 2004. <http://whqlibdoc.who.int/publications/2004/924159263X.pdf>.

World Health Organization (WHO). *Accountability for Women’s and Children’s Health: DRC*. http://www.who.int/woman_child_accountability/countries/cod/en/

_____. *Democratic Republic of Congo: Summary Country Profile for HIV/AIDS Treatment Scale-up*. 2005. http://www.who.int/hiv/HIVCP_COD.pdf.

_____. *Essential Environmental Health Standards in Health Care*, 2008. http://www.who.int/water_sanitation_health/hygiene/settings/ehs_health_care.pdf.pdf

_____. *Managing Complications in Pregnancy and Childbirth: A Guide for Midwives and Doctors*, 2000. <http://www.who.int/reproductive-health/impac/Introduction.html>.

_____. *Safe and Unsafe Induced Abortion: Global and Regional Levels in 2008, and Trends during 1995–2008*. 2012. http://apps.who.int/iris/bitstream/10665/75174/1/WHO_RHR_12.02_eng.pdf?ua=1.

Zinnen, Veronique. *La Mise en œuvre de l'Agenda pour l'Efficacité de l'Aide dans le Secteur de la Santé en République Démocratique du Congo - Rapport d'Etat des Lieux en Vue de la Sélection d'Etudes de Cas*. Institut de Recherche Santé et Société, Université Catholique de Louvain. February 2012. http://www.grap-pa.be/attachments/article/69/201202_capitalisationdp_rdc3.pdf.

Appendix A: Detailed tables on RH service availability

1. Family planning

Table A 1. Facilities with at least one package of family planning methods available (n=25)		
Method	Hospitals (n=1)	Health centers (n=24)
OCPs	1	15 (62.5%) ND* (1)
Injectable contraceptives	1	13 (54.2%) ND* (1)
IUDs	1	11 (45.8%) ND* (1)
Implants	1	13 (54.2%) ND* (1)
Emergency contraception	1	13 (54.2%) ND* (1)

*No data

Table A 2. Facilities with staff and supplies to provide daily oral contraceptive pills (OCPs) (n=26)		
	Hospitals (n=1)	Health centers (n=25)
OCPs provided in last 3 months (self-reported)	1	18 (72%)
Staff trained to provide short-acting FP methods	1	16 (66.7%) ND* (1)
FP counseling available	1	19 (76%)
BP cuff	1	20 (83.3%) ND* (1)
Stethoscope	1	22 (91.7%) ND* (1)
Daily oral contraceptive pills	1	15 (62.5%) ND* (1)
Facilities with minimum essential supplies and staff to provide OCPs	1	12 (48%)

*No data

Table A 3. Facilities with staff and supplies to provide injectables (n=26)		
	Hospitals (n=1)	Health centers (n=25)
Injectables provided in last 3 months (self-reported)	1	18 (72%) ND* (1)
Staff trained to provide short-acting FP methods	1	16 (66.7%) ND* (1)
FP counseling available	1	19 (76%)
BP cuff	1	20 (83.3%) ND* (1)
Stethoscope	1	22 (91.7%) ND* (1)
Needles and syringes	1	23 (95.8%) ND* (1)
Injectable contraceptives (progestin-only, i.e., Depo)	1	13 (54.2%) ND* (1)
Facilities with minimum essential supplies and staff to provide injectables	1	10 (40%)

*No data

Table A 4. Facilities with staff and supplies to provide IUDs (n=26)		
	Hospitals (n=1)	Health centers (n=25)
IUD insertion performed in last 3 months (self-reported)	1	12 (48%)
Staff trained to provide long-acting FP methods	1	15 (62.5%) ND* (1)
FP counseling available	1	19 (76%)
Sterile gloves	1	19 (79.2%) ND* (1)
Speculum	1	14 (58.3%) ND* (1)
Uterine sound	1	10 (41.7%) ND* (1)
Uterine tenaculum	1	11 (45.8%) ND* (1)
Sponge forceps	1	11 (45.8%) ND* (1)
Antiseptics	1	23 (95.8%) ND* (1)
IUDs	1	11 (45.8%) ND* (1)
Facilities with minimum essential supplies and staff to provide IUDs	1	9 (36%)

*No data

Table A 5. Facilities with staff and supplies to provide implant (n=26)		
	Hospitals (n=1)	Health centers (n=26)
Implant insertion performed in last 3 months (self-reported)	1	15 (60%)
Staff trained to provide long-acting FP methods	1	15 (62.5%) ND* (1)
FP counseling available	1	19 (76%)
Sponge forceps	1	11 (45.8%) ND* (1)
Scalpel handle (No. 3) and blade	1	11 (45.8%) ND* (1)
Needles and syringes	1	23 (95.8%) ND* (1)
Antiseptics	1	23 (95.8%) ND* (1)
Implants	1	13 (54.2%) ND* (1)
Facilities with minimum essential staff and supplies to provide Implants	1	5 (20%)

*No data

2. Obstetric services, including EmONC

Table A 6. Providing other essential obstetric services and main reasons for not providing (n=26)						
<i>Function</i>	Use partograph to manage labour		Active management of third stage of labour		Administer ARVs to HIV+ mothers and newborns in maternity	
	Hosp	HC	Hosp	HC	Hosp	HC
Provided in last 3 months (self-reported)	1	21 (87.5%) ND* (1)	1	20 (83.3%) ND* (1)	1	0
Provided in the past 3 months (clients noted in registers)					0	
Main reason service not provided						
Lack of skilled staff/training	2 (66.7%)		4 (100%)		19 (79.2)	
Lack of supplies / equipment	3 (100%)		2 (50%)		21 (80.8%)	
Not authorized to provide	0		0		4 (16.7%)	

*No data

Table A 7. Parenteral antibiotics (n=26)		
	Hospitals (n=1)	Health centers (n=25)
Parenteral antibiotics administered in last 3 months (self-reported)	1	11 (45.8%) ND* (1)
Needles and syringes	1	23 (95.8%) ND* (1)
Ampicillin	1	7 (29.2%) ND* (1)
Gentamycin	1	6 (25%) ND* (1)
Injectable Metronidazole	1	3 (13%) ND* (2)
Facility able to provide parenteral antibiotics	1	2 (8.3%)

*No data

Table A 8. Parenteral uterotonics (n=26)		
	Hospitals (n=1)	Health centers (n=25)
Parenteral uterotonics administered in last 3 months (self-reported)	1	5 (20.8%) ND* (1)
Needles and syringes	1	23 (95.8%) ND* (1)
Oxytocin	1	20 (83.3%) ND* (1)
Facility able to provide parenteral uterotonics	1	4 (16.7%)

*No data

Table A 9. Parenteral anticonvulsants (n=26)		
	Hospitals (n=1)	Health centers (n=25)
Parenteral anticonvulsants administered in last 3 months (self-reported)	1	6 (25%) ND* (1)
Needles and syringes	1	23 (95.8%) ND* (1)
Magnesium sulfate	1	9 (37.5%) ND* (1)
Facility able to provide parenteral anticonvulsants	1	1 (4%)

*No data

Table A 10. Manual removal of placenta (n=26)		
	Hospitals (n=1)	Health centers (n=25)
Manual removal of placenta performed in last 3 months (self-reported)	1	10 (41.7%) ND* (1)
Needles and syringes	1	23 (95.8%) ND* (1)
Non-sterile gloves	1	23 (95.8%) ND* (1)
Antiseptic solution	1	23 (95.8%) ND* (1)
Apron	1	17 (70.8%) ND* (1)
Oxytocin	1	20 (83.3%) ND* (1)
Facility able to provide parenteral antibiotics	1	7 (28%)

*No data

Table A 11. Assisted vaginal delivery (n=26)		
	Hospitals (n=1)	Health centers (n=25)
Assisted vaginal delivery performed in last 3 months (self-reported)	1	1 (4.2%) ND* (1)
Vacuum extractor	1	2 (8.3%) ND* (1)
Non-sterile gloves	1	23 (95.8%) ND* (1)
Apron	1	17 (70.8%) ND* (1)
Facility able to provide assisted vaginal delivery	1	1 (4%)

*No data

Table A 12. Neonatal resuscitation with appropriate bag and mask (n=26)		
	Hospitals (n=1)	Health centers (n=25)
Neonatal resuscitation with appropriate bag and mask performed in last 3 months (self-reported)	1	6 (25%) ND* (1)
resuscitation bag and infant face mask	1	8 (33.3%) ND* (1)
Facility able to provide neonatal resuscitation	1	5 (20%)

*No data

Table A 13. Blood transfusion (n=1)	
	Hospital (n=1)
Blood transfusion provided in last 3 months (self-reported)	1
Staff able to conduct blood transfusion	1
Airway needle for collecting/giving blood	0
Blood typing and cross-matching reagents	1
Blood collection bags	0
Hepatitis B Test	1
Hepatitis C Test	1
HIV Test	1
Syphilis Test	1
Canula/catheter for IV line (16-18)	1
Non-sterile gloves	1
Facility able to provide blood transfusion	0

Table A 14. Caesarean section (n=1)	
	Hospital (n=1)
Caesarean section performed in last 3 months (self-reported)	1
Staff able to perform caesarean section	1
Type of anesthesia used (<i>write in</i>)	General/Spinal
Sponge forceps	1
Straight artery forceps with teeth	1
Uterine haemostasis forceps	1
Needle holder	1
Scalpel blades	1
Round-bodied needles/No 12/size 6	1
Triangular point suture needles/7.3 cm/size 6	1
Abdominal retractor or double ended	1
Curved or straight operating scissors/blunt	1
Straight scissors, pointed	1
Dressing (non-toothed tissue) forceps	1
Sutures	1
Gauze swabs (sterile)	1
Suction nozzle	1
Ampicillin OR Cefazolin	1
Oxytocin	1
Ringer's Lactate OR Normal Saline	1
Needles and syringes	1
Apron	1
Boots	1
Mask	1

Gown	1
Able to provide surgery for caesarean section	1
Table A 15. Facilities with supplies for at least one type of anesthesia (n=1)	
Anesthesia	Hospital (n=1)
Spinal	
Ringer's Lactate OR Normal Saline	1
Lidocaine 2% or 1%	1
Adrenaline (Epinephrine)	1
Spinal needles (18-gauge to 25-gauge)	1
Ketamine	
Ketamine	1
Atropine sulfate	1
Diazepam	1
Oxygen	0
Dextrose OR Glucose	1

Table A 16. Anesthesia (n=1)	
Facility able to provide caesarean section – surgery, complications and at least one type of anesthesia	1 (w/spinal anesthesia)

3. Comprehensive abortion care

Table A 17. Post-abortion care (n=26)		
	Hospitals (n=1)	Health centers (n=25)
PAC counseling is available	1	17 (68%)
Family planning is offered to all clients who receive abortion services before they are discharged from the facility	1	13 (54.2%) ND* (1)
If no, why not?	NA	Lack of skilled staff (6) Lack of supplies (9) Not authorized (4)
Facilities with minimum essential elements to provide counseling and family planning for clients who receive abortion services	1	13 (52%)

*No data

Table A 18. Removal of retained products of conception using MVA or misoprostol (n=26)		
	Hospitals (n=1)	Health centers (n=25)
PAC performed in last 3 months using MVA (self-reported)	1	11 (45.8%) ND* (1)
At least one staff trained to provide PAC	1	14 (58.3%) ND* (1)
Vaginal speculum	1	14 (58.3%) ND* (1)
Sponge forceps	1	11 (45.8%) ND* (1)
Uterine tenaculum	1	11 (45.8%) ND* (1)
MVA syringe, adapters and cannulae	1	11 (45.8%) ND* (1)
Antiseptic solution	1	23 (95.8%) ND* (1)
Non-sterile Gloves	1	23 (95.8%) ND* (1)
Oxytocin	1	20 (83.3%) ND* (1)
Needles and syringes	1	23 (95.8%) ND* (1)
Facilities with minimum essential supplies to provide PAC with MVA	1	9 (37.5%)
PAC performed in last 3 months using misoprostol (self-reported)	1	2 (8%)
At least one staff trained to provide PAC	1	14 (58.3%) ND* (1)
Misoprostol	1	2 (8.3%) ND* (1)
Facilities with minimum essential supplies to provide PAC using misoprostol	1	2 (8%)

*No data

4. HIV and other STIs

Table A 19. STI treatment (n=26)		
	(n=1) Hospitals	(n=25) Health centers
Performed syndromic or laboratory diagnosis and treatment of STIs in last 3 months (self-reported)	1 (100%)	22 (88%)
Gentamycin	1 (100%)	6 (25%) ND* (1)
Ceftriaxone	1 (100%)	3 (13%) ND* (2)
Injectable metronidazole	1 (100%)	3 (13%) ND* (2)
Facilities with essential drugs and provided STI care in previous three months	1 (100%)	2 (9%) ND* (2)

*No data

5. Clinical management of rape

Table A 20. Facilities able to provide selected elements of clinical management of rape (n=26)		
	Hospital (n=1)	Health center (n=25)
POST-EXPOSURE PROPHYLAXIS (PEP)		
Provision of PEP for CMoR in last 3 months (self-reported)	1	17 (68%)
PEP	1	11 (45.8%) ND* (1)
Facilities with minimum elements to provide PEP	1	10 (40%)
EMERGENCY CONTRACEPTION		
Provision of EC for CMoR in last 3 months (self-reported)	1	17 (68%)
EC	1	13 (54.2%) ND* (1)
Facilities with minimum elements to provide EC	1	12 (48%)
ANTIBIOTICS FOR SEXUALLY TRANSMITTED INFECTIONS (STIs)		
Provision of antibiotics for presumptive treatment of STIs for CMoR (self-reported)	1	20 (80%)
Gentamycin	1	10 (40%) ND* (1)
Ceftriaxone	1	12 (48%)
Injectable metronidazole	1	2 (8%)
Facilities with minimum elements to provide antibiotics for STIs	1	2 (8%)

*No data

Appendix B: Provider knowledge and attitudes questionnaire results

Table B 1. Professional classification and years of experience		% (n)
What is your professional classification?	Medical doctor	7.69% (1)
	Health officer (non-physician clinician)	0
	Midwife or nurse-midwife	15.38 (2)
	Nurse	61.54 (8)
	Other (<i>specify</i>)	15.38 (2)
How many years has it been since you received your professional qualification?	Mean no. of years: 9.62	

Service	a. Have you provided (read service) in the past 3 months?	b. Have you ever received instruction on how to provide this service?
	%(n)	%(n)
1. Counsel women and girls about family planning and contraception	100.00 (14)	64.29 (9)
2. Insert an IUD	42.86 (6)	64.29 (9)
3. Insert an implant (e.g. Implanon, Jadelle)	64.29 (9)	57.14 (8)
4. Perform manual vacuum aspiration (MVA) for post-abortion care	57.14 (8)	64.29 (9)
5. Provide post-abortion care using misoprostol	28.57 (4)	28.57 (4)
6. Perform an induced abortion using MVA	7.14 (1)	14.29 (2)
7. Perform an induced abortion using misoprostol	14.29 (2)	21.43 (3)
8. Provide post-abortion family planning counselling	78.57 (11)	64.29 (9)
9. Use the partograph	78.57 (11)	78.57 (11)

Service	a. Have you provided (read service) in the past 3 months?	b. Have you ever received instruction on how to provide this service?
	%(n)	%(n)
10. Do active management of the third stage of labor	85.71 (12)	78.57 (11)
11. Insert a post-partum IUD	28.57 (4)	64.29 (9)
12. Perform manual removal of the placenta	50.00 (7)	57.14 (8)
13. Administer IM or IV magnesium sulfate for the treatment of severe pre-eclampsia or eclampsia	7.14 (1)	35.71 (5)
14. Use the vacuum extractor for assisted vaginal delivery	21.43 (3)	35.71 (5)
15. Resuscitate a newborn with bag and mask	42.86 (6)	64.29 (9)
16. Administer corticosteroids to a mother with preterm labour	28.57 (4)	50.00 (7)
17. Manage newborn infections, including use of injectable antibiotics	35.71 (5)	57.14 (8)
18. Administer antiretrovirals to prevent mother-to-child transmission of HIV	42.86 (6)	57.14 (8)
19. Conduct a post-rape exam	64.29 (9)	71.43 (10)
20. Provide emergency contraception following sexual violence	64.29 (9)	92.86 (13)

Table B 2. Staff knowledge of key RH actions and services		
No.	Question	Mean score
1.	For a woman in labor, what observations do you make as you monitor her progress? (circle all spontaneous answers and ask: Anything else?)	a. Fetal heartbeat b. Color of amniotic fluid c. Degree of molding d. Dilatation of the cervix e. Descent of the head f. Uterine contractions g. Maternal blood pressure h. Maternal temperature i. Maternal pulse 5.21 Total=9
2.	Where do you write down these observations? (circle all spontaneous answers and ask: Anything else?)	a. On a partograph b. In the patient's clinical record c. On the partograph in the prenatal card d. In the delivery (or other) register e. On a piece of paper 1.43 Total=5
3.	When a woman arrives at the facility with heavy bleeding or develops severe bleeding after giving birth, what do you look for? (circle all spontaneous answers and ask: Anything else?)	a. Signs of shock (dizziness, low blood pressure) b. Amount of external blood c. Signs of anemia d. Damage to the genital tract e. Whether the uterus is contracted f. Retained products or retained placenta g. Full bladder 2.93 Total=7
4.	When a woman develops heavy bleeding after delivery, what do you do? (circle all spontaneous answers and ask: Anything else?)	a. Massage the fundus b. Give ergometrine or oxytocin (IV or IM) c. Begin IV fluids d. Empty full bladder e. Take blood for hemoglobin and cross-matching f. Examine woman for lacerations g. Manually remove retained products h. Refer 2.71 Total=8

Table B 2. Staff knowledge of key RH actions and services		
No.	Question	Mean score
5.	When a woman who just gave birth has not delivered the placenta, what do you do? <i>(circle all spontaneous answers and ask: Anything else?)</i>	a. Empty the bladder b. Check for signs of separation of placenta before controlled cord traction c. Give or repeat oxytocin d. Do manual removal of the placenta e. Administer IV fluids f. Monitor vital signs for shock and act g. Check that uterus is well contracted h. Determine blood type and cross-match i. Prepare operating theater j. Refer 3 Total=10
6.	The last time you delivered a baby, what immediate care did you give the newborn? <i>(circle all spontaneous answers and ask: Anything else?)</i>	a. Clean the baby's mouth before the shoulder comes out b. Clean the baby's mouth, face, and nose c. Ensure the baby is breathing d. Ensure the baby is dry e. Observe for color f. Ensure baby is kept warm (skin-to-skin) g. Administer prophylaxis for the eyes h. Weigh the baby i. Care for the umbilical cord j. Initiate breastfeeding within the first 30 minutes k. Evaluate/examine the newborn within the first hour 5 Total=11
7.	What are the signs and symptoms of infection, or sepsis, in the newborn? <i>(circle all spontaneous answers and ask: Anything else?)</i>	a. Less movement (poor muscle tone) b. Poor or no breastfeeding c. Hypothermia or hyperthermia d. Restlessness or irritability e. Difficulty breathing or fast breathing f. Deep jaundice g. Severe abdominal distention 3.14 Total=7

Table B 2. Staff knowledge of key RH actions and services			
No.	Question		Mean score
8.	When a newborn weighs less than 2.5kgs, what special care do you provide? <i>(circle all spontaneous answers and ask: Anything else?)</i>	a. Make sure the baby is warm (skin-to-skin/kangaroo technique) b. Provide extra support to the mother to establish breastfeeding c. Monitor ability to breastfeed d. Monitor baby for the first 24 hours e. Ensure infection prevention	1.64 Total=5
9.	Which family planning methods can a woman use immediately post-partum?	a. IUD b. Tubal ligation c. Condoms d. Lactational Amenorrhea Method (LAM)	1.43 Total=4
10.	Which FP methods can a woman who is breastfeeding begin using 6 weeks after delivery?	a. IUD b. Tubal ligation c. Condoms d. Progestin only pills	2.07 Total=4
11.	When you counsel a woman for family planning, what do you do/discuss?	a. Ask whether she has used FP before b. Ask about her reproductive goals c. Check for medical complications d. Tell her about dual protection e. Tell her about all FP methods	2 Total=5
12.	What are the immediate complications of an unsafe abortion? <i>(circle all spontaneous answers and ask: Anything else?)</i>	a. Sepsis b. Bleeding c. Genital injuries d. Abdominal injuries e. Shock	2.71 Total=5
13.	When you see a woman with complications from an unsafe or incomplete abortion, what do you do? <i>(circle all spontaneous answers and ask: Anything else?)</i>	a. Do a vaginal exam b. Assess vaginal bleeding c. Assess vital signs d. Begin IV fluids e. Begin antibiotics f. Do (manual/electric) vacuum aspiration g. Do dilatation with curettage or evacuation h. Provide misoprostol i. Provide counseling j. Refer	3.93 Total=10

Table B 2. Staff knowledge of key RH actions and services		
No.	Question	Mean score
14.	What information do you give patients who were treated for an incomplete or unsafe abortion? (circle all spontaneous answers and ask: Anything else?)	a. Information on how to prevent reproductive tract infection/HIV b. Information about when a woman can conceive again c. Counseling on family planning and services d. Refer for family planning or provide FP methods e. Information on social support f. Information about the consequences of an unsafe abortion 2 Total=6
15.	What do you do when someone presents with signs of a reproductive tract infection (RTI)?	a. Diagnose and provide antibiotics according to the syndromic approach b. Counsel on contact tracing c. Explain how to use condoms and provide condoms d. Counsel on HIV and offer VCT e. Refer 2.43 Total=5
16.	When a woman presents after a rape, what do you do? (circle all spontaneous answers and ask: Anything else?)	a. Encourage her to report to police b. Facilitate filling out the police report c. Take history and do an examination d. Take forensic evidence e. Counsel for pre and post HIV testing f. Counsel about pregnancy prevention g. Provide emergency contraception h. Provide post-exposure prophylaxis for HIV i. Provide antibiotics to prevent STIs j. Request that she do urine, vaginal smear/swabs, and/or blood exams k. Refer 4.71 Total=11

Table B 3. Staff knowledge of key RH actions and services*		
No.	Question	Mean score
1.	Visiting a health facility to check on a pregnancy's progress is a good idea for a pregnant woman.	3.86
2.	Delivering a baby at a health facility is safer than delivering a baby at home.	3.93
3.	Within the couple, both the wife and the husband should have equal say in important decisions.	3.43
4.	The more children a mother has, the more respected she is in the community.	2.43*
5.	Men should be responsible for choosing how many children their wife/wives will have.	2.79*
6.	Family planning should be available to every woman who wants to use a method.	3.36
7.	A woman should be able to obtain a family planning method without her husband's presence.	2.57
8.	IUDs can be a good method for women who have no children.	2.07
9.	Adolescent, unmarried girls should be allowed to obtain family planning if they want.	3.14
10.	Young unmarried men and women need to know how to prevent pregnancies.	3.57
11.	Young unmarried women should be required to get their parents' consent in order to receive a family planning method.	2.86*
12.	Young unmarried men and women should be educated about sex and reproduction	3.86

*All scores are based on Likert scale responses to each statement: strongly agree (4), agree (3), disagree (2), and strongly disagree (1). Statements 4, 5, and 11 were reverse coded. All items are scored out of a total possible score of 4 with higher means signalling attitudes that promote equitable and good quality RH care.