ICRH

INTERNATIONAL CENTRE FOR REPRODUCTIVE HEALTH

ACTIVITY REPORT 2012

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ICRH BELGIUM 2012

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Message from prof. Marleen Temmerman

former director of ICRH

Dear ICRH teams in Ghent and elsewhere in the world, it is indeed with mixed feelings that I left “my” ICRH after almost 20 years. I used to call it “my baby”, but ICRH is not a baby anymore; it has grown well and is now a beautiful, strong, young lady, dedicated to improve the world and fight for justice.

I am very proud of the accomplishments of ICRH worldwide that is a WHO co-operative centre since 2004. That is why I do not feel like leaving the family. On the contrary: I am grateful for the opportunity to lead the work from a global perspective, working from WHO Head Quarters. Together with many WHO collaborating centres we can take major steps forward in building a better world in which sexual and reproductive rights for all is no longer a remote dream but an everyday reality.

I wish to thank all of you, wish you all the best, and I look forward to meeting you along the road.

Best regards,

Marleen Temmerman

Preface

2012 has been a remarkable year for ICRH. In addition to the 'business as usual' evolutions such as finalisation of old projects and starting-up of new ones, and the unavoidable staff turnover, we have been confronted with two very special events: we moved offices and we had to say goodbye to our founder and director prof. Marleen Temmerman. The first event is irrefutably a good thing: we exchanged our worn-out, dark and damp housing in the K3 building for freshly renovated offices on the top floor of K4, with a nice view on Ghent city on one side of the building, and the hospital campus on the other.
The second event, the departure of Marleen Temmerman to the WHO, is less fortunate: we will certainly miss her great expertise, her inspiring enthusiasm and her inexhaustible energy. On the other hand, we are proud and happy that she has been selected to take the lead of the WHO Department of Reproductive Health and Research, and we are looking forward to learning about the great achievements that she will undoubtedly accomplish there. Furthermore we are confident that we will always be able to count on her advice and her moral support.
As for ICRH, we are determined to carry on the work that Marleen has put on the rails and to perform a significant role in international multidisciplinary research, education and provision of services in the field of sexual and reproductive health and rights.

2012 proved to be a productive year, with 47 articles published in international peer reviewed journals, and more than 20 ongoing projects. However, we feel that the climate for research project funding is worsening due to -among others- savings in public spending for science and development cooperation. For an organisation like ICRH that is largely dependent on project funding, this is bad news, but nevertheless we managed to launch a few exciting new projects, and we have submitted many project proposals of which we hope many will be accepted for funding in the near future.

In the course of 2012, ICRH started up an internal process to develop a research strategy for the coming years and to align its organisational structures to it. A new clustering of projects and collaborators has been elaborated and will be fully implemented in 2013. For this 2012 Activity Report we still report along the 'old' thematic lines, with five clusters: HIV and STIs, HPV and Cervical Cancer, Health Systems, Maternal and Child Health, and Sexual and Gender Based Violence.

As in previous years we give an overview of the projects in which we have been involved in 2012, with a brief description of each project. If you want more information on one of our projects, or on ICRH in general, please don't hesitate to contact us. Or even better: pay us a visit in our new offices!

Olivier Degomme,
Scientific Director.

Dirk Van Braeckel,
Director of Finance and Administration.

The International Centre for Reproductive Health

The International Centre for Reproductive Health (ICRH) is a multidisciplinary research institute within Ghent University. The Centre was established in 1994 in response to the International Conference on Population and Development (ICPD, Cairo, 1994).

ICRH conducts research and intervention projects in all areas of reproductive health, implements capacity building, provides community education, prevention and HIV testing services, and advocates for sexual and reproductive health and rights. ICRH is active in Africa, Latin America, Asia and Europe.

ICRH is a WHO Collaborating Centre for Research on Sexual and Reproductive Health and has experience in attracting donor funds from a wide range of agencies.

The main fields of expertise are:

- HIV and sexually transmitted infections (STI) with a particular focus on prevention
- Maternal Health including mother & child health, with specific attention for safe motherhood and family planning
- Sexual and gender based violence (SGBV), harmful traditional practices such as female genital mutilation (FGM) and forced/child marriage
- Integration of sexual and reproductive health and rights within health systems
- Human Papilloma Virus (HPV)

ICRH conducts fundamental, epidemiological, social, clinical, health systems as well as policy research related to the themes listed above, but beside that, the Centre is also active in:

- Training and capacity building: academic programmes (such as Masters and PhDs), courses and workshops but also on-site training, monitoring, evaluation and supervision to strengthen local capacity
- Reproductive health services: advice, consultancies, technical assistance, policy support, designing, planning, implementing, monitoring and evaluation
- Advocacy: awareness raising at all levels (including the scientific and the political), and keeping sexual and reproductive health and rights on the policy agenda.

Activities 2012

1. Activities of the HIV/STI team

The HIV/STI team comprises all ICRH-Belgium staff involved in projects and activities in the domain of HIV and other sexually transmitted infections, excluding Human Papilloma Virus (HPV). The objectives of the team are to coordinate all ICRH-Belgium HIV/STI activities, to exchange information, to develop joint initiatives and to build capacity among team members. The focus is on HIV prevention, with special attention for a combination prevention approach. Other topics addressed by the team include mathematical modelling of HIV transmission and of the effect of different HIV prevention strategies, HIV risk reduction among youth in an African context, HIV prevention among most-at-risk populations, the link between HIV and infertility, the prevention of mother-to-child transmission (PMTCT), HIV counselling and testing in Europe, vaginal microbicides trials and the role of mycoplasmas and bacterial vaginosis. In 2012, the team was led by Yves Lafort.

1.1 PROJECTS

1.1.1 Improved Sexual and Reproductive Health and Rights Services for Most at Risk Populations (MARP) in Tete, Mozambique

Financed by:	Flemish International Cooperation Agency; United States Agency for International Development; Vale do Rio Doce
Coordinator:	ICRH Belgium
Partners:	
ICRH Belgium	Belgium
ICRH Mozambique	Mozambique
Provincial Health Directorate of Tete	Mozambique
Budget:	1,162,819 EUR
Start date:	1 October 2010
End date:	31 March 2014
Contact person at ICRH:	Yves Lafort yves.lafort@ugent.be

In 2011 ICRH initiated a project that aims at expanding and improving sexual and reproductive health and rights (SRHR) among most-at-risk populations in the Tete-Moatize area in central Mozambique. The main target populations are female sex workers (FSW) and their male clients. The project builds on the previous projects supporting a drop-in centre ('night clinic') for FSW and truck drivers in Moatize. During the course of the project, the current centre will be replaced by two clinics: one in Moatize and one in Tete-City, and the services will be expanded to a comprehensive package of all SRHR services. The health

facility-based services will be complemented by community outreach activities, comprising behaviour change communication and structural interventions to create a supportive environment for a sustained behaviour change. Special attention will be given to reaching FSW's clients through interventions in entertainment venues and at the workplace. The impact of the project will be carefully assessed through a pre-post assessment comparison that includes qualitative and quantitative data collection techniques. During 2012, the support for the night clinic was continued and the construction of a new clinic in Moatize was completed. Ethical approval was received for the qualitative components of the baseline assessment (key informant interviews, in-depth interviews with FSW and clients, and focus group discussion with FSW) and these components were integrated in the DIFFER situational analysis (see below).

Preparing research activities at a health centre in Tete, Mozambique

1.1.2 Diagonal Interventions to Fast Forward Enhanced Reproductive Health (DIFFER)

Financed by:	European Commission – FP7
Coordinator:	ICRH Belgium
Partners:	
ICRH Belgium	Belgium
Ashodaya Samithi	India
ICRH Kenya	Kenya
ICRH Mozambique	Mozambique
University of The Witwatersrand - MatCH & Centre for Health Policy	South Africa
University College London, Centre for International Health & Development	United Kingdom
Budget:	2,997,443 EUR
Start date:	1 October 2011
End date:	30 September 2016
Contact person at ICRH:	Yves Lafort yves.lafort@ugent.be

In October 2011, the DIFFER project was officially launched in Mombasa, Kenya. DIFFER stands for 'Diagonal Interventions to Fast-Forward Enhanced Reproductive health' and aims at improving access to sexual and reproductive health (SRH) for the most vulnerable by a better linkage between interventions targeted at most-at-risk populations, in particular female sex workers (FSW), and the general reproductive health services. The project is implemented at four sites in Kenya (Mombasa), Mozambique (Tete), South Africa (Durban) and India (Mysore). The project has a strong south-south component and will translate previous successes and lessons learned in India to the Sub-Saharan African context. First, a thorough policy and situational analysis will identify the gaps and provide the information needed to design the intervention. Then, a package of comprehensive SRH services will be developed for both female sex workers and women of the general population together with site-specific models of how to integrate these two packages. At the end of the 5-years project the models will be evaluated for their feasibility, acceptability, effectiveness, cost-effectiveness and sustainability.
During 2012, the study protocols and data collection tools of the baseline situational analysis were developed and submitted for ethical approval. In the second half of the year data collection was started. The situational analysis comprises a desk review of policy documents, key informant interviews, facility audits, provider interviews, client exit-interviews, FSW focus group discussions and a cross-sectional survey among FSW.
Project website: http://www.differproject.eu/

Nightly outreach activities with female sex workers in Durban, South Africa

1.1.3 Assessment by molecular methods of the healthy and disturbed vaginal microbiota of South African women

Financed by:	NRF-FWO	
Coordinator:	ICRH Belgium	
Partners:		
ICRH Belgium		Belgium
WRHI (formerly RHRU)		South-Africa
Budget:	420,000 EUR	
Start date:	1 October 2010	
End date:	30 September 2013	
Contact person at ICRH:	Rita Verhelst Rita.Verhelst@UGent.be	

Molecular based methods for the quantification of vaginal bacteria are being implemented at the Wits Reproductive Health and HIV Institute (WRHI) in Johannesburg, South Africa. This technology will allow our South-African partner to assess alterations in the vaginal microbiome that might contribute to increased transmission of sexually transmitted agents and increased mother-to-child-transmission of HIV. Furthermore, this technology will contribute to the assessment of the safety of vaginal microbicides in future HIV microbidices studies.

In 2012, two short-term training sessions in the ICRH Kenya Clinical Research Laboratory and a 7-weeks training in Belgium were organized. Two WRHI master students were trained in real time and a master student and lab staff member were trained in the genotyping of the Human Papilloma Virus. Furthermore, during a stay in Belgium, a WHRI master student optimized a PCR based method for the characterization of the vaginal microbiota.

1.1.4 Characterisation of novel microbicide safety biomarkers in East and South Africa (BIOMARKERS)

Financed by:	EDCTP
Coordinator:	ICRH Kenya
Partners:	
ICRH Kenya	Kenya
WRHI (formerly RHRU)	South-Africa
Projet Ubuzima	Rwanda
MITU/NIMR	Tanzania
ITM	Belgium
AIGHD (formerly AMC-CPCD)	Netherlands
ICRH	Belgium
Ghent University	Belgium
LSHTM	UK
MRC-CTU	UK
Budget:	2,688,595 EUR
Start date:	5 April 2009
End date:	4 January 2013
Contact person at ICRH:	Rita Verhelst Rita.Verhelst@UGent.be

Vaginal microbicides are being developed to expand HIV prevention options for women and couples.
The efficacy of a microbicide is a balance between its activity and its safety.
A healthy vaginal environment protects women from infections and should therefore remain intact during and after product administration. The purpose of this study is to establish baseline ranges of biomarkers related to the vaginal environment in groups of women targeted for microbicide trials in Kenya, Rwanda, and South Africa. Biomarkers of inflammation, epithelial integrity, immune activation, and antimicrobial activity in relation to the cervicovaginal microbiome are being assessed in healthy HIV-negative adult women at low risk for HIV, healthy HIV-negative adult women at high risk for HIV, HIV-negative adult women with bacterial vaginosis (BV), HIV-negative adult women using traditional vaginal practices, HIV-negative adult pregnant women, HIV-negative adolescents, and healthy HIV-positive adult women. The expected outcomes are the identification of promising biomarkers that could be introduced in the next generation of microbicide safety trials, and baseline data on these biomarkers against which future assessments in women who are using candidate microbicide products can be compared.In August 2012, the follow up of all 430 enrolled women ended. Furthermore, primary lab analyses were performed locally and in Belgium. Preliminary results were reported at the Microbicides 2012 conference. It was found by Crucitti *et al*. that the modified Ison-Hay criteria for scoring of vaginal smear, as described by Verhelst *et al*. (Verhelst *et al.*, BMC Microbiology 2005), improves the categorization of the normal vaginal microbiota and that this method could have an added value in clinical trials with vaginal products and devices.
Furthermore, the usefulness of a self-sampling device for the collection of cervicovaginal lavage samples in microbicides trials was reported by Ndayisaba *et al*.at the Microbicides 2012 Conference in Sidney.

Finally, a workshop was organised at the Wits Reproductive Health and HIV Institute (WHRI) in Johannesburg, South Africa. During this workshop all ongoing lab analyses were discussed and a publication plan was drafted.

1.1.5 Age-disparity, sexual connectedness and HIV infection in disadvantaged communities around Cape Town, South Africa

Financed by:	Research Foundation Flanders (FWO), Belgium VLIR-UOS, Belgium	
Coordinator:	ICRH Belgium	
Partners:		
SACEMA		South Africa
Hasselt University		Belgium
Budget:	500,000 EUR	
Start date:	1 January 2010	
End date:	31 December 2014	
Contact person at ICRH:	Wim Delva Wim.delva@ugent.be	

By February 2012, ICRH-Belgium, in collaboration with SACEMA completed the data collection phase of this sexual behaviour surveillance project, which aims to get more detailed insights into the the role of the sexual network structure in the spread and control of HIV in South Africa. Crucial connections between sexual network structure and the spread of HIV remain inadequately understood, especially as regards the role of multiple, concurrent and age-disparate relationships, and how these features correlate with each other and other risk factors.

In 2012, we conducted a number of statistical analyses of this cross-sectional survey (n=878) in three urban disadvantaged communities in the greater Cape Town area to study associations between HIV status, sexual connectedness and age-disparity. The survey documented in detail the one-year sexual histories of respondents. The questionnaire was administered in a safe and confidential mobile interview space, using Audio Computer-Assisted Self-Interview (ACASI) technology on touch screen computers. All study communities participated in a previous TB/HIV surveillance study, from which HIV test results were anonymously linked to the survey dataset.

A first analysis indicated that, thanks to our innovate approach to the administration of the survey, we were able to minimise social-desirability bias and elicit more valid responses to sensitive questions about respondents' sexual histories. In another analysis, conducted in collaboration with Hasselt University and SACEMA, we scrutinised evidence in support of the coital dilution hypothesis. Under this hypothesis, the per-partnership frequency of sex acts decreases when people move from being in a monogamous relationship to being in multiple, concurrent relationships. Our analysis did not find evidence for this hypothesis, nor for increased condom use during episodes of concurrency.

1.1.6 The potential impact of expanded ART access for HIV prevention

Financed by:	Bill & Melinda Gates Foundation, World Health Organization	
Coordinator:	HIV Modelling Consortium	
Partners:		
SACEMA Hasselt University ICRB Belgium Imperial College London London School of Hygiene and Tropical Medicine		South Africa Belgium Belgium United Kingdom United Kingdom
Budget:	Unknown	
Start date:	1 October 2011	
End date:	1 July 2012	
Contact person at ICRH:	Wim Delva Wim.delva@ugent.be	

Under the coordination of the HIV Modelling Consortium, we have collaborated with colleagues from Hasselt University, Imperial College London and the London School of Hygiene and Tropical Medicine, in systematic literature review and modelling work concerning the potential impact of expanded ART access for HIV prevention, beyond the current WHO guidelines. This work has to the publication of a paper in the top journal PLoS Medicine The paper is a narrative review of the likely health impact, epidemiological consequences, cost implications and programmatic challenges for alternative approaches to expanding the existing national HIV treatment programmes. Following this publication, we were part of a modelling study, in which we used the modelling tool SIMPACT to investigate the dynamics of HIV transmission, HIV prevention and HIV treatment in complex heterosexual networks. In 2012, SIMPACT was used for simulations, commissioned by the World Health Organization, to assess the likely epidemiological and health economics impact of alternative expansion options for the antiretroviral treatment programme in South Africa.

1.2 OTHER ACTIVITIES OF THE HIV/STI TEAM

1.2.1 Belgian HIV/AIDS working group

The HIV team is an active member of the Belgian HIV/AIDS working group. The working group wants to mobilize the different Belgian actors working in the field of HIV/AIDS in order to contribute to the implementation of an AIDS policy that reduces the impact of HIV/AIDS worldwide. The working group does this by exchanging knowledge, information and experiences in the field of HIV/AIDS and by means of advocacy. In 2012 ICRH continued to take part in the working group.
Contact persons at ICRH: Kristien Michielsen and Yves Lafort.

1.2.2 BREACH

ICRH is member of the Belgian AIDS and HIV Research Consortium (BREACH). This consortium unites al Belgian AIDS Reference Laboratories (ARLs) and AIDS Reference Centres (ARCs), as well as other organizations that play a significant role in AIDS-related research or prevention, such as ICRH and Sensoa. BREACH aims among others at setting up a Belgian AIDS cohort, that will centralize all data on HIV/AIDS in Belgium and make them available for research purposes. On 28 and 29 September 2012, BREACH organized the Belgian HIV Prevention Summit'.
Contact person at ICRH: Kristien Michielsen and Dirk Van Braeckel.

2. Activities of the Sexual and Gender Based Violence team

2.1 PROJECTS

2.1.1 Study to map the current situation and trends of Female Genital Mutilation in the 27 EU member states and Croatia

Financed by:	European Institute for Gender Equality	
Contractor:	ICRH Belgium	
Partner:		
Yellow Window Management Consultants (Group Member)		Belgium
Budget:	436,125 EUR	
Start date:	December 1, 2011	
End date:	December 15, 2012	
Contact person at ICRH:	Els Leye els.leye@ugent.be	

In November 2011, the European Institute for Gender Equality (EIGE) commissioned a study to map the current situation and trends of female genital mutilation (FGM) in all 27 EU Member States and Croatia. The study was performed by a consortium of researchers from the International Centre for Reproductive Health and Yellow Window Management Consultants, and was finalized in December 2012. The main objective of this study was to support and contribute to the future development of strategies for the elimination of different forms of violence against women, including FGM. The study assessed and analyzed the current situation of FGM in the EU27 and Croatia, most notably in relation to prevalence, policy and legal frameworks, actors working on FGM and their particular approaches. The study collated and documented successes and challenges in policy development and implementation on FGM, and looked at past and present practices with potential in relation to FGM prevention, protection, prosecution, provision of services and partnerships. Finally, the study provided recommendations on data collection on FGM in the EU.

The study methodology consisted of two main parts: a desk study and an in-depth phase. The first part, the *desk study*, started late December 2011 and ran until April 2012. This desk research included a web-based search along with e-mail contacts and enquiries by phone (and, in some cases, in person) in order to collect all the information and data available on FGM relating to the themes mentioned above, in all EU Member States and Croatia. All data collected were then classified and stored in an Excel file and in an Endnote library (for academic publications). A pool of native speaking researchers performed the national desk research in 28 countries (in 24 different languages), after which they compiled an analytical report of their desk study, resulting in 28 country reports that provided detailed insights into the situation of FGM in their respective country. Per country, a country fact sheet was also developed. After collecting, mapping and analyzing the national data collected in the EU27 and Croatia, nine countries

were selected for a *qualitative in-depth study*, namely France, Germany, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden and the UK. The EU level perspective was also included in this phase in order to deepen the knowledge about the views of European and international institutions on the European approach to FGM. The in-depth study aimed at assessing successes and challenges in the work on FGM in these nine countries and at the EU level, and establishing past and present good practices in relation to prevention, protection, prosecution, provision of services, and partnerships. Nine native speaking researchers were selected for conducting the fieldwork in each country. Based on the information collected, an analytical report was drawn up by the national researchers, after which a comparative analysis was done of the nine country reports and the EU/international report.

By mid-December, 28 country fact sheets, a final report, executive summary and publication were submitted to EIGE.

2.1.2 Mapping the multi-sectorial support for survivors of sexual violence in South Kivu Province, DR Congo.

Financed by:	VLIR-UOS	
Coordinator:	ICRH Belgium	
Partners:		
Université Catholique de Bukavu		Democratic Republic of Congo
Budget:	200,000 EUR	
Start date:	September 2010	
En date:	September 2012	
Contact person at ICRH:	Steven Callens, steven.callens@ugent.be	

The fight against sexual violence is a priority for the government of the DRC in the process of rebuilding the country and in the fight against poverty. The overall objective of this academic project is to strengthen the Catholic University of Bukavu as a leader in the fight against sexual violence. The overall development objective is to increase the quality of care for women survivors of sexual violence. The direct beneficiaries of the project are researchers from the Faculties of Medicine, Law and Economics, as well as researchers at the local NGO 'Vision d'Espoir'. The indirect beneficiaries are the agents involved in national and international programmes to support women survivors of sexual violence. The main project activities are: building capacity in research methodologies, training in English, in depth analysis of a database on sexual violence of UNFPA and the development of a mapping of stakeholders in the territory Walungu and Bukavu.

2.1.3 Training of hospital-based health professionals in caring for women with FGM

Financed by:	Belgian Federal Agency Public Health
Coordinator:	Groupement pour l'Abolition des Mutilations Sexuelles
Partners:	
ICRH Belgium	
Budget	26,370
Start date:	1 November 2011
End date:	31 March 2013
Contact person at ICRH:	Els Leye els.leye@ugent.be

The training aims at limiting the psychological and social impact of FGM on the health of women through an adequate care for women and girls with FGM. More specifically, this project aims at enhancing the theoretical knowledge of care providers on FGM and to build their capacities in caring for women with FGM. The training programme is specifically targeted at midwifes and gynaecologists at maternities in 9 hospitals in the province of Antwerp and six in the Brussels region.
Els Leye provided ten trainings during 2012 (9 in the Province of Antwerp and 1 in the Brussels region).

2.1.4 Girls and Women forced into marriage: understanding the impact of migration on Moroccan communities

Financed by:	VLIR-UOS (Vlaamse Interuniversitaire Raad - University Development Cooperation)
Coordinator:	ICRH Belgium
Partners:	
Université Mohammed V	Rabat, Morocco
Association El Amane pour le développement de la Femme	Marrakech, Morocco
Start date:	1 October 2009
End date:	30 September 2013
Contact person at ICRH:	Alexia Sabbe alexia.sabbe@ugent.be

The project studies the impact of context on the occurrence of forced marriage in Morocco, and among Moroccan immigrants in Belgium. In general, the project explores to what extent migration has an influence on perceptions and decision-making processes of forced marriage. More specifically, it examines to what degree the cultural and religious perceptions have been transferred in migratory circumstances. In addition, the impact of different context, policies, law enforcement, etc. is investigated. Overall, an in-depth understanding of the phenomenon of forced marriage will provide

policy makers and program managers with factual support and background knowledge for potential interventions.

In 2012, the field research in Morocco continued. With the assistance of the local partner 'Association El Amane pour le Développement de la Femme', participants were recruited for in-depth household interviews and for Focus Group Discussions. Participants within the larger Marrakech region were targeted. Overall, seven Focus Group Discussions took place in a variety of settings, ranging from urban Marrakech to remote rural areas. In four of these group discussions, the Intergenerational Dialogue method was applied. In addition, stakeholder interviews were carried out among professionals from a wide range of sectors (legal, health, education, government, etc.) to explore the factors that contribute to the occurrence of child and forced marriage in Morocco.

In the framework of the Belgian research activities, the 'Managers of Diversity' programme, individual interviews and Focus Group Discussions were organised. Group discussions using the Intergenerational Dialogue method were held, as well as intercultural group discussions. Activities are ongoing in 2013.

2.1.5 Registration of FGM in hospitals

Financed by:	Belgian Federal Agency for Public Health
Coordinator:	ICRH Belgium
Partners:	
University Medical Centre Saint Pierre, Brussels	Belgium
Budget:	44891
Start date:	1 February 2012
End date:	31 December 2013
Contact person at ICRH:	Els Leye Els.leye@ugent.be

Although the current medical registration system used in Belgian hospitals contains all necessary components to adequately register cases of FGM seen during hospitalizations and at day-clinics, there is evidence that points to a serious underreporting. In addition, the current system does not provide any way to register specific information on the types of surgical repairs done in the context of FGM. This project aims therefore at evaluating the existing procedures for hospitalizations and day-clinics in order to assess whether a more accurate use of the existing registration procedures will lead to a higher registration. The study is implemented in ten Belgian hospitals.

2.1.6 Focal Point on Harmful Cultural Practices (F♀HCUS)

F♀HCUS wishes to promote the health, well-being and human rights of vulnerable groups by contributing to a critical reflection, by increasing knowledge and by delivering better services for those living with the consequences of, or who are at risk of undergoing, harmful cultural practices.

In 2012, the following activities were carried out.

- Research:
  - The influence of migration on forced marriages in Belgium, UK and Morocco (see supra)
  - KAP-study (Knowledge-Attitude-Practice) among Flemish gynaecologists on hymen reconstructions
  - Literature study on the effects of polygamy on sexual and reproductive health of women
  - Descriptive study on cosmetic genital surgery in Flanders
  - Study to map FGM in 27 EU Member States and Croatia (see infra)
  - KAP-study among Flemish midwives on female genital mutilation
  - Qualitative study among Flemish midwives and gynaecologists on communication for preventing female genital mutilation

- Service delivery
  - *UZ F♀HCUS consultations for vulnerable women*: every Friday afternoon in the University Hospital, specialized consultations are foreseen for women with female genital mutilation, women requesting hymen reconstructions and victims of sexual violence. Two research

protocols were developed to collect socio-demographic data on women attending the consultations.

- *Expertise delivery*:
  - Els Leye is advisory member of the END FGM –European Campaign, led by Amnesty International.
  - FGM in Europa is one of the themes covered by ICRH/FOHCUS within its assignment as World Health Organisation Collaborating Centre.
  - Member of Jury for Summer School Health and Migration, organized by Ugent, July 2012
  - Expert to scientific committee of the research of Ilaria Simonelli "The Health Care Services approach to FGM/C according to the therapeutic, prevention and salutogenic models, Health and Migration Programme, Bologna Local Health Authority, 2011-2013
  - "Training for hospitals in Flanders on female genital mutilation", in collaboration with NGO GAMS, for the Federal Department of Public Health, January 2012 to March 2013.
  - Oral presentation of "Methodology of the study to map FGM in 28 EU States – EIGE Study", at 6th FOKO Conference, Oslo, October 18-20, 2012
  - Oral presentation of "Striking the right balance between prevention and prosecution of FGM in the EU", at "Dynamics of FGM: strategies for prevention worldwide and in Switzerland", Unicef, Berne, Switzerland, November 29, 2012
  - Involved in co-promoting following PhD studies:
    - "Girls and women forced into marriage: understanding the impact of migration on Moroccan communities" (Alexia Sabbe – International Centre for Reproductive Health)
    - " Female genital mutilation as a characteristic of religious identity among Coptic and Muslim women in Egypt" (An Van Raemdonck - Centre for Intercultural Communication and Interaction CiCi of Ugent)
    - "The Impact of the international human rights framework on eradicating Female Genital Mutilation (FGM) in Senegal and Ethiopia" (Annemarie Middelburg - International Victimology Institute Intervict of Tilburg University)
    - "Honour Related Violence in Flanders. Myth or reality? (Sofie Withaeckx - RHEA Centre for Gender and Diversity of VUB)

2.1.7 BIDENS-study, a six country study on life-events & fear of mode of delivery, part II.

Financed by:	EU DAPHNE program
Coordinator:	NTNU, Norwegian University of Science and Technology Faculty of Medicine
Partners:	
ICRH Belgium	Belgium
University Hospital, Department of Obstetrics and Gynaecology	Iceland
National Hospital, Copenhagen, Juliana Marie Center, Ultrasound	Denmark
Karolinska University Hospital	Sweden
Tartu University Clinicum Department of Obstetrics and Gynaecology	Estonia
Budget:	205,029 EUR
Start date:	2007
End date:	2012
Contact person at ICRH:	An-Sofie Van Parys ansofie.vanparys@ugent.be

The hypothesis of this multi-country study is that women who experienced violence during their lifetime, will develop more fear of childbirth and therefore have more instrumental (C-sections and/or vacuum and/or forceps) deliveries. This study managed to gather data for more than 7000 women over the six countries. In Belgium, 864 women were included.
In 2009 the study received additional funding for two years to continue the analysis of the collected data and to continue the national and international dissemination of the results. The main results of the study are currently ready to be published.

2.1.8 Partner violence and pregnancy, an intervention study within perinatal care (MOM-study)

Financed by:	Research Foundation Flanders (FWO), Belgium
Coordinator:	ICRH Belgium
Partners:	
University Hospital Ghent, Dpt. Of Ob/Gyn, AZ Groeninge Kortrijk, AZ Jan Palfijn Gent, AZ St Jan Brugge, OLV ziekenhuis Aalst, OLV van Lourdes zieken huis Waregem, UZA, Virga Jesse ziekenhuis Hasselt, ZNA Middelheim Antwerpen, ZOL Genk	Belgium
Budget:	180,000 EUR
Start date:	1 October 2009

End date:	30 September 2014
Contact person at ICRH:	An-Sofie Van Parys ansofie.vanparys@ugent.be

The aim of this research project is twofold: firstly a large-scale prevalence/incidence study on intimate partner violence during pregnancy and secondly an intervention study to address violence during pregnancy.

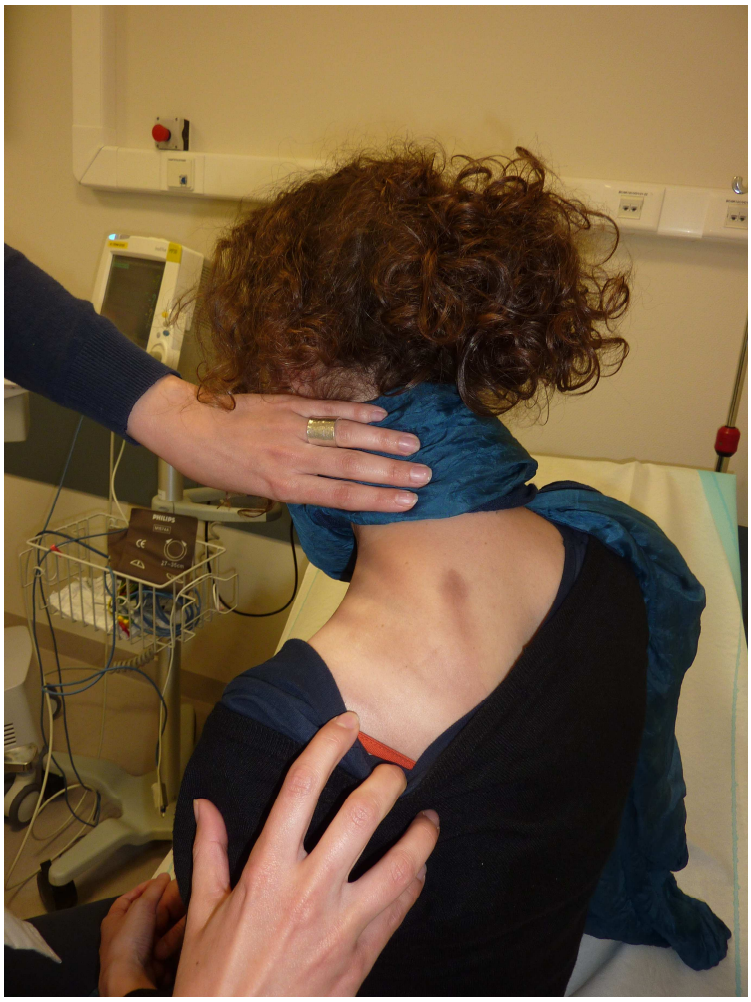
By means of a written questionnaire, the prevalence/ incidence study measures physical, psychological and sexual partner violence in a pregnant population and explores the correlation with psychosocial health. Moreover, this doctoral study wants to determine if there are effective and safe methods to improve help-seeking behaviour and safety behaviour, and to reduce partner violence and hence some negative consequences for mother and child. Therefore, several pregnant women who reported partner violence are selected (based on the questionnaire) and interviewed in the second part of the study. We will test if, when we screen for violence during pregnancy and refer women to local resources, the prevalence/incidence of partner violence is reduced, women adopt more safety behaviour, seek more help and/or the negative effects of partner violence are reduced.

In 2012, the recruitment for the first part of the study (questionnaire) was finalized. We managed to gather data for 1894 women spread over 12 hospitals. Until now 220 women were randomised into the second part of the study, 68 women were interviewed a first time and 36 a second time.

The data of the first part of the study is currently being analyzed and the data of the second part is processed.

2.1.9 Addressing interpersonal violence in Belgian hospitals

Financed by:	Belgian Federal Agency Public Health
Coordinator:	ICRH Belgium
Partners:	
Hospital St Luc Bouge	Belgium
Ghent University Hospital	Belgium
Budget:	49.926 EUR
Start date:	1 Dec 2011
End date:	30 Sept 2012
Contact person at ICRH:	Ines Keygnaert & An-Sofie Van Parys Ines.keygnaert@ugent.be Ansofie.vanparys@ugent.be



This project aims to sensitize and train health workers in Belgian hospitals in addressing, assisting and referring patients in interpersonal violence situations adequately. However, due to budgetary restrictions, the different project pathways had to be altered offering only advanced trainings and protocol development coaching to hospitals already included in the project in the previous year (2010-2011).

In 2012, 11 hospitals (4 Dutch speaking and 7 French speaking) participated in a three stage project.

We started with an in-situ situation- and needs analysis of every participating hospital. In collaboration with internal working groups, we assessed their policies regarding prevention, psychosocial aid, care and referral of patients and staff with violence experiences.

In a second phase, we organised an advanced course comprising of 24 to 28 hours of accredited training in which we build capacity on violence related topics as: detecting risks,

signals and symptoms of different types of violence, communication skills on violence, adequate medical, psychosocial and legal care of patients and staff in violent situations, effective referral, implementation of guidelines, tools and procedures from a holistic approach, and simulation of specific violence protocols.
Finally, we assisted and coached the participating hospitals in the development of their hospital specific protocols on interpersonal violence, intimate partner violence, sexual violence, child abuse and maltreatment, elderly abuse and maltreatment, and violence against staff.

Although the project was once again assessed by the hospitals as essential support on this topic and positively evaluated by the Federal Agency, it is still unsure whether continuation can be assured due to current budgetary restrictions at the federal governmental level.

2.1.10 Coordination of Ghent University Hospital holistic IPV protocol

Financed by:	Internal funding
Coordinator:	ICRH Belgium
Partners: Ghent University Hospital	
Budget:	
Start date:	1 December 2010
End date:	31 December 2014
Contact person at ICRH:	Ines Keygnaert Ines.keygnaert@ugent.be

Since 2004, Ghent University Hospital is implementing a gradually expanding protocol on sexual and partner violence. An evaluation in 2011 however revealed that too little key staff knew and applied this protocol in daily practice. The ones who did, found that the user-friendliness of the document and the coordination of the implementation in the field could be enhanced. Furthermore, the hospital was now more and more confronted with other types of violence too, which were not yet dealt with in the current procedures. A complete revision was thus required.

A multidisciplinary coordination working group was set up in 2011 composing of key staff of the Ghent University Hospital and external experts to assure an evidence-based and inclusive approach to all types of interpersonal violence. The working group firstly evaluated the current procedures on its strengths, weaknesses, opportunities and challenges after which an action plan was developed. Based on this action plan an

evidence-based, holistic, inclusive and ethically sound protocol on interpersonal violence is being developed. Subprocedures and implementation challenges were discussed, tested and developed throughout the course of 2012. In 2013 the protocol is to be finalised and formalised in the hospital quality standard operating procedures. Once this is done, the inclusive protocol will be launched in a test phase and a communication campaign will be set up. Gradually, more and more staff will be trained to implement the IPV protocol until full implementation can be assured and evaluated in 2014.

2.2 OTHER ACTIVITIES OF THE SGBV TEAM

In addition to the national and international conferences and workshops that were organized within the context of the projects listed above, the SGBV team members participate in the following advisory committees and/or networks:

- Board of European Network for the Prevention of FGM
- Advisory commission of 'END FGM European Campaign – strategy for EU institutions', Amnesty International Ireland
- Belgian round table on honour-related violence

The SGBV team gave several tutorials, training sessions, workshops and guest lectures on violence related topics tailored to the specific capacity building needs of students in health and social sciences, health professionals, or lay public. 'Enhance your communication skills on violence' was for example a 2 to 8-hour workshop that was given at different occasions by Ines Keygnaert and An-Sofie Van Parys .
Els Leye chaired a session in a meeting at the Belgian Senate, on May 3, in the framework of the Campaign Ban FGM Resolution.
At the occasion of the award 'Women for Peace', which both Els Leye and Marleen Temmerman received, they were invited at an event at the Royal Palace, in the presence of her majesty the queen and his majesty the king, on May 8.

2.2.1 Flemish Forum for Child Abuse

Following the adoption of the Flemish Protocol Child Abuse Justice-Welfare' in 2011, the Flemish Forum for Child Abuse was established to monitor the implementation of the protocol, to discuss good practices and obstacles in this implementation, to sensitise the general public on child abuse and to support care providers and police/justice stakeholders, in tackling child abuse. This Flemish Forum Child Abuse has requested ICRH, GAMS and Intact (the latter of two NGOs working on the prevention of FGM in Belgium) to organize 3 focus groups for the health sector, welfare sector and justice/police, with the aim to discuss obstacles in the prevention of girls from FGM and to provide a discussion note with recommendations for a better protection of girls from FGM, to the Forum. ICRH has organised a first workshop at the premises of ICRH, on the 26th of September 2012, and co-organised the workshop for the welfare sector in Brussels on the 11th of October.

2.2.2 Migrants' sexual and reproductive health in the EU: a critical review of policy and legal frameworks

The objective of this review was to investigate the right of migrants to sexual and reproductive health and whether this right is ensured throughout the European Union in both national and EU legal and policy frameworks. This review concentrates on three main issues: right and access to general health, to sexual and reproductive health, and prevention of and response to sexual violence. Particular attention was paid to the legal status of migrant populations and the impact this might have on their possibilities to exert their right to sexual and reproductive health. We included in our review recommendations for policy-making, notably at EU level, as well as for future research in the field. The method used was a Critical Interpretive Synthesis.
The results of this study were presented during the 2nd International Conference of the International Network for Sexual Ethics and Politics (Ghent, 29th-31st August 2012). This review also led to the draft of an A1 article, to be submitted to a peer-reviewed academic journal during Spring 2013. This article focuses on the right to sexual and reproductive health and the obstacles migrants currently face within the EU on their way to the highest attainable standard of health. A second article, focusing on the prevention of and response to violence, is planned for mid 2013.
Contact persons: ***Ines.keygnaert@ugent.be*** **&** ***Aurore.guieu@ugent.be***

3. Activities of the Maternal Health Team

Every year, worldwide an estimated number of 273,500 women die from pregnancy or childbirth related causes. Furthermore every year an estimated 2.9 million babies die in the first four weeks of life. And although the international community agreed at the International Conference on Population and Development (ICPD) in Cairo (1994) to make reproductive health care universally available no later than 2015, many ICPD agenda items on sexual and reproductive health remain unfinished after more than 15 years.

Though lots of efforts to reduce global maternal and neonatal mortality and morbidity took place during the last decade, among others the Millennium Development Goals (MDG) initiative, neonatal and maternal mortality remains unacceptably high. The MDGs on maternal and child health, which aim to reduce the maternal mortality ratio by three quarters between 1990 and 2015 and the under-five mortality rate by two thirds, are far from reaching their targets. Even though data show progress on reducing maternal and neonatal mortality, this progress is still way below the annual decline needed to meet the MDG targets and most developing countries will take many years after 2015 to achieve these targets.

The overall objective of the ICRH 'maternal health team' is conducting research to contribute to improve maternal and neonatal health and well-being. This research aims to provide access to good quality maternal, neonatal, sexual and reproductive health care for all, with a focus on equity and integration and continuum of care. Working with and involving all levels of the society from community level to policy makers and all levels of the health system from community health workers to specialized hospitals is also considered crucial by the maternal health team in order to accomplish its objectives.

3.1 PROJECTS

3.1.1 Missed Opportunities in Maternal and Infant Health: reducing maternal and newborn mortality and morbidity in the year after childbirth through combined facility- and community-based interventions (MOMI)

Financed by:	European Commission – FP7
Coordinator:	ICRH Belgium
Partners:	
Institut de Recherche en Sciences de la Santé	Burkina Faso
ICRH Kenya	Kenya
Parent and Child Health Initiative	Malawi
ICRH Mozambique	Mozambique
Eduardo Mondlane University – Faculdade de Medicina	Mozambique
Faculdade de Medicina da Universidade do Porto - Department of Hygiene and Epidemiology	Portugal

Institute for Global Health, University College of London	United Kingdom
Budget:	2,997,647 EUR
Start date:	1 February 2011
End date:	31 January 2016
Contact person at ICRH:	Els Duysburgh Els.duysburgh@ugent.be Birgit Kerstens Birgit.kerstens@ugent.be

In the past decade, maternal health services have largely focused on the management of intrapartum complications and on rationalising the package of antenatal services to include emergency obstetric care provided by skilled birth attendants. These interventions have sought to target what are widely considered to be the most common and immediate causes of maternal death. Yet this approach fails to address many underlying morbidities that are instrumental in generating high rates of maternal mortality, such as anaemia and inadequate birth spacing. Also missing is a direct focus on the substantial proportion of maternal deaths in the postpartum. The essential package and optimum structure of postpartum services for women and newborns in Africa remains poorly defined, with many missed opportunities for improved care.

The MOMI project intends to develop and implement an integrated package of interventions targeting women and newborn health in the early postpartum period and throughout the first year after childbirth. This package will be delivered through a combined facility- and community-based approach designed to integrate services and strengthen health systems. It will be implemented in four African countries (Burkina Faso, Kenya, Malawi and Mozambique) by a consortium of five African and three European partners.

In 2012 a cross-country comparative analysis of maternal and newborn health policies and services at the four study sites was conducted in order to facilitate cross-country learning and add to global knowledge about how postpartum services could be more effectively organized, both at facility and community level, to improve maternal and newborn health. A mixed methods approach to collection of data on national postpartum policy, health system drivers and barriers to provision of, and demand for, postpartum care, was taken. Triangulation of data from documentary analysis, stakeholder mapping and qualitative analyses of semi-structured interviews and community focus group discussions were combined with quantitative analysis of routinely collected national and facility level data. The results of the baseline assessments contributed to the identification of feasible context-specific interventions hypothesised to improve postpartum care and outcomes in the four study sites. The Policy Advisory Board members have contributed to the selection of proposed interventions for the respective sites and the teams have started to prepare the implementation plans for the accepted intervention packages which are due to start mid 2013.

MOMI partners presenting baseline assessment results at the Integration for Impact conference in Nairobi, Kenya in September 2012

The critical analysis of the individual and cross-country findings on postpartum policy and services in the four sub-Saharan countries gives insights into factors relevant to international debate on postpartum care policies in Africa. The baseline assessment results are therefore disseminated through presentations at conferences (e.g. Integration for Impact in Nairobi, the World Health Summit in Berlin, the GLOW conference in Liverpool, the second Health Systems Research symposium in Beijing) and publications in relevant journals (e.g. abstract published in The Lancet supplement for the World Health Summit). Dissemination of project progress and research results is also done through distribution of the MOMI newsletter, local media (e.g. LuMiMa) and the MOMI website. Progress has been made in terms of the capacity building within the MOMI partnership whereby each African study site has identified and appointed a student to enrol in a PhD or master programme within the context of the MOMI project. A second face-to-face Project Management Team meeting was held in Ouagadougou in February 2012.
Project website: http://www.momiproject.eu/

3.1.2 Quality of Maternal and Prenatal Care: Bridging the Know-Do Gap (QUALMAT)

Financed by:	European Commission – FP7
Coordinator:	University of Heidelberg, Germany
Partners:	
ICRH Belgium	Belgium
Centre de Recheche en Santé de Nouna	Burkina Faso
Navrongo Health Research Centre	Ghana
Karolinska Institute	Sweden
Muhimbili University of health and Allied Sciences	Tanzania
Budget:	2,915,228 EUR
Start date:	1 May 2009
End date:	30 April 2014
Contact person at ICRH:	Els Duysburgh Els.duysburgh@ugent.be

Maternal and neonatal mortality and morbidity remain unacceptably high in sub-Saharan Africa. Though sub-Saharan Africa is home to only 13% of the world population and 19% of the global under-5 population, an estimated 52% of all maternal deaths and 49% of all under-5 deaths occurred in this region.

The QUALMAT project wants to improve the quality of maternal and neonatal care through addressing the existing gap between 'knowing what to do' and 'doing what you know'. The project is designed as an intervention research project and aims to increase staff motivation through developing and implementing a system of performance based incentives for health care workers and through introducing a computer-assisted clinical decision support which will help providers to comply with established standards of care.

The QUALMAT programme is implemented by a consortium of six European and African partners in three resource-poor countries highly burdened by maternal and neonatal mortality: Burkina Faso, Ghana and Tanzania;. In each country, an intervention and a control district were selected, and in each of these districts six health facilities were selected to be included in the research project.

In the QUALMAT project ICRH Belgium is responsible for monitoring and evaluation of the interventions and as such documenting changes in the quality of maternal and newborn care. Intervention implementation started during the summer of 2012 and at present regular monitoring is conducted of these interventions. In preparation of the monitoring the ICRH researcher visited the QUALMAT research site in February 2012.

Project website: http://www.qualmat.net/

Use of computer-assisted clinical decision support in a primary health centre in Nouna, Burkina Faso.

3.1.3 Reducing maternal mortality trough maternity waiting homes

Financed by:	National Lottery Belgium Collibri Foundation for Education	
Coordinator:	ICRH Global	
Partners:		
ICRH Kenya		Mombasa, Kenya
ICRH Mozambique		Maputo, Mozambique
Budget	100,000 euro	
Start date:	1 October 2011	
End date:	30 September 2013	
Contact person at ICRH:	Dirk Van Braeckel dirk.vanbraeckel@ugent.be	

In Africa, one out of 210 mothers dies during pregnancy or delivery. One of the causes is the relatively low rate of institutional deliveries, due to transport problems and lack of infrastructure, but also due to cultural prejudices and resistance against giving birth outside the family circle. One of the ways to facilitate and encourage institutional deliveries is the establishment of 'maternity shelters' or 'maternity waiting homes' ('casas de espera' in Portuguese): facilities where future mothers can spend the last few days of their pregnancy close to a maternity hospital, so that they are assured of timely professional care during the delivery. This type of facilities exists in many African countries, but often the functioning is not optimal and the occupancy rate is much lower than it could be. ICRH launched a project in Kenya and in Mozambique, aimed at promoting the use of maternity waiting homes and improving their functioning. Activities consist in:

-Informing en sensitizing community leaders, future mothers, their partners and facilities, and the community in general about the purpose and the importance of maternity waiting homes;

-Reinforcing the functioning of a number of selected homes;

-Looking, together with the staff and management of the selected homes, for ways to improve the service delivery and to provide health education on nutrition, family planning and infections to the women staying in the homes.

The maternity waiting homes that were selected for the project are located in Malindi and Kilifi in Kenya, and in Meluco and Ancuabe in Mozambique. In Kenya, nurses were recruited, the services of the maternity waiting homes were improved and a data collection system was set up. At the end of 2012, the uptake of women was interrupted due to a two months hospital staff strike but overall the project seems to be quite successful. In Mozambique, the project met severe difficulties due to administrative and logistic hurdles and apart from attempts to solve the situation, no field activities took place in 2012.

The project funding from the Collibri Foundation for Education is linked to an initiative to sell birth cards (meant to be given as a birth present) in Dreambaby shops. The revenue from the sales goes entirely to the project, and in addition, Dreambaby donates an amount for every card that is sold. Information on the Dreambaby/Collibri Foundation can be found at
http://www.dreambaby.collishop.be/ecom/nl/promo/DreamBaby/1212445722624_Promotion
(in French and in Dutch).

3.1.4 Integrating Post-Abortion Family Planning Services into China's Existing Abortion Services in Hospital Settings (INPAC)

Financed by:	European Commission – FP7	
Coordinator:	ICRH Belgium	
Partners:		
Chinese Society for Family Planning-Chinese Medical Association		China
Fudan University		China
National Research Institute for Family Planning		China
Sichuan University		China
University of Aarhus - Danish Epidemiology Science Centre		Denmark
Liverpool School of Tropical Medicine		UK
Budget:	2,928,384.00 EUR	
Start date:	1 August 2012	
End date:	31 July 2016	
Contact person at ICRH:	Wei-Hong Zhang WeiHong.Zhang@UGent.be Shuchen Wang Shuchen.Wang@ugent.be	

Each year, an estimated 43.8 million induced abortions are estimated taking place worldwide. In 2008 around 13 million induced abortions were conducted in China. Unsafe abortions and repeated abortions are associated with a high risk of long-term physical and psychological morbidity and with a heavy social-economic burden. In China, the large numbers of induced abortions are primarily due to contraceptive failure or insufficient use of contraception.

The INPAC (INtegrating Post-Abortion family planning services into existing abortion services in hospital settings in China) project aims to evaluate the effect of introducing post-abortion family planning (FP) services in existing hospitals in order to reduce unintended pregnancies and repeated abortions, and thus to improve women's health. The project also aims to translate research findings into policy recommendations on health system organization and to improve equitable access to reproductive healthcare and FP service. The results will contribute to standardize the post-abortion family planning services and decrease the long-term costs related to abortion in China. They will also be of interest to other countries with high abortion rates.

INPAC has 4 study phases and both qualitative and quantitative methods are used in this project. Based on the results of the situation analysis of the current FP policy and a feasibility assessment of the

integration approach context specific interventions will be developed. The proposed interventions will be implemented in hospitals located in 30 divisions of mainland China and will be evaluated with regard to their effectiveness.

The project was officially launched on August 1, 2012, and the project kick-off meeting was held in Beijing in November 2012. Around 40 members from the INPAC consortium attended the kick-off meeting. At the opening session, Ms. Yu Hua, Deputy Director of National Research Institution for Family Planning (NRIFP), China, welcomed all participants on behalf of the host. Other speeches were given by invited guests: Mr. Wifried Pfeffer, the first Secretary of Belgian Embassy in China; Mr. Yang Min, Deputy Secretary General of Chinese Medical Association and Mr. Domien Proost, Chief Representative of Easter Flanders & UGent China Platform in Beijing. Prof. Dr. Marleen Temmerman, founder and former director of ICRH, presented the history of ICRH and the development of ICRH activities in China.

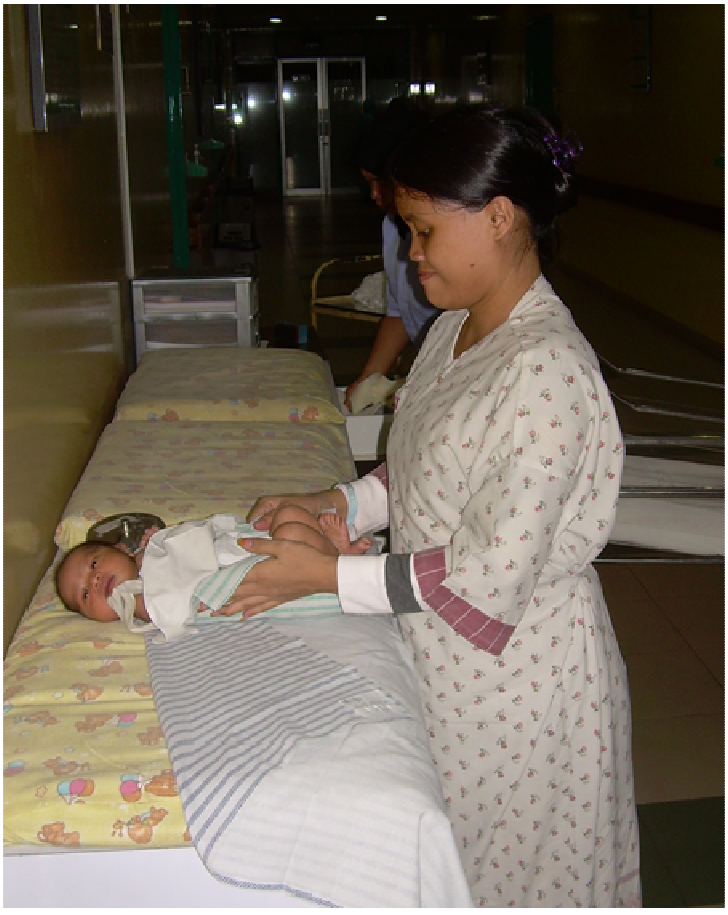
The outcome of the meeting included a clear work plan and a timeline for the first 18 months of the project and several agreements on the scientific, financial and administrative management of the project. Prof. Wei-Hong Zhang, the scientific coordinator of the project, expressed in her closing remarks her satisfaction with the meeting and announced that the next Programme Management Team meeting will be held in September 2013.
Project website: http://www.inpacproject.eu

INPAC kick-off meeting 3 to 6 November 2012 in Beijing, China

In the beginning of 2013, a literature review on post-abortion care in China is finalized and the comprehensive situation analysis including both qualitative and quantitative studies is in its preparation phase. The qualitative study will be conducted in three provinces to represent different areas of socio-economic development in China: highly developed (Zhejiang), medium level of development (Hubei) and relatively poor and undeveloped (Yunnan). As part of the quantitative study data from 300 hospitals located over 30 provinces will be collected. The protocols of both quantitative and qualitative studies have been developed and were submitted for ethical approval.

3.2 OTHER ACTIVITIES OF THE MATERNAL HEALTH TEAM

3.2.1. Comprehensive needs assessment of newborn care in selected countries in East Asia and the Pacific



Mother and baby in Budi Kemuliaan Hospital, Jakarta, Indonesia.

On behalf of UNICEF EAPRO (UNICEF East Asia and Pacific Regional Office) ICRH, together with HERA, conducted newborn care assessments in Indonesia, Lao People's Democratic Republic and the Philippines. This assignment started in November 2012 and will be finished in March 2013.

The main objective of the assignment is to conduct a comprehensive, equity-focussed needs assessment for newborn care and programming in three selected countries in the East Asian and Pacific region, being: Indonesia, Lao People's Democratic Republic and the Philippines. The findings and recommended actions with respect to planning and implementation of newborn health programmes will contribute to programme strengthening in all countries covered by the regional office of UNICEF in East Asia and the Pacific. Development of a work-plan including the assessment protocol and tools and a 2-week country visit to each of the countries took place in November and December 2012.

4. Activities of the Health Systems Team

4.1 PROJECTS

4.1.1 Community Embedded Reproductive Care for Adolescents in Latin America (CERCA)

Financed by:	European Commission – Framework 7 Programme
Coordinator:	ICRH Belgium
Partners:	
South Group, Bolivia	Bolivia
University of Cuenca, Ecuador	Ecuador
Kaunas University of Medicine, Lithuania	Lithuania
University of Amsterdam	The Netherlands
National Autonomous University of Nicaragua	Nicaragua
Instituto Centro Americano de la Salud	Nicaragua
Budget:	2,893,700 EUR
Start date:	1 March 2010
End date:	28 February 2014
Contact person at ICRH:	Peter Decat Peter.decat@ugent.be Sara De Meyer SaraA.demeyer@ugent.be

CERCA, Community-Embedded Reproductive health Care for Adolescents in Latin America, is an interventional research project that seeks to contribute to global knowledge about how health systems can be more responsive to teenagers' sexual and reproductive health needs. Its immediate objective is to create a community-embedded health care intervention that will empower adolescents. The CERCA project is conducted in selected research settings in three Latin American cities: Cochabamba in Bolivia, Cuenca in Ecuador and Managua in Nicaragua. During the first phase of the project a situation analysis and quantitative pre-intervention surveys were conducted in the research settings to assess the determinants of adolescents´ sexual and reproductive health. Based on these results and health behaviour theories (the Health Belief Model, the Theory of Planned Behaviour and the Social Cognitive Theory) an intervention strategy was developed. In 2012 the CERCA consortium has been implementing and following up the on-going interventions. There has also been paid much attention to the dissemination of projects' concept, objectives and progress. A large variety of media is used for informing a broad local, national and international audience at public, academic and political level.
Project website: www.proyectocerca.org


Hablemos
de Sexualidad
sin Pena en
la Familia

4.1.2 Introducing provider-patient communication as a new topic for training and research at health institutes in Cochabamba (Bolivia) and Cuenca (Ecuador).

Financed by:	VLIR-UOS
Coordinator:	ICRH Belgium
Partners:	
Centro de investigación y estudios de la salud- Universidad Nacional Autónoma de Managua (CIES-UNAN)	Nicaragua
The Faculty of Medicine of the University of Cuenca (UC).	Ecuador
South Group	Bolivia
Budget:	70,560 Euro
Start date:	1 June 2012
End date:	1 May 2014
Contact person at ICRH:	Peter Decat peter.decat@ugent.be

The topic provider-patient communication is relatively underrepresented in training and research of academic institutions in Latin-America. The project aims to promote communication skills of health professionals in Cuenca and Cochabamba. The project takes advantage of the experiences in Nicaragua to introduce the topic in Ecuador and Bolivia by initiating training and research activities in 'provider-patient communication' in Cuenca and Cochabamba. In the two cities promoters have been identified who will awake interest among the local actors and create favorable conditions in the two cities for progressing towards the integration of the communication theme into the academic program. A teacher from Ecuador came on scholarship to Belgium for this purpose. Workshops have been organized in two cities. Consultations of physicians have been videotaped for research purposes.

4.1.3 Quality health care in primary health services in Nicaragua

Financed by:	VLIR-UOS
Coordinator:	ICRH Belgium
Partners:	
Universidad National Autónoma de Nicaragua, facultad de Medicina	Nicaragua
Budget:	306,758 EUR
Start date:	1 October 2008
End date:	30 September 2013
Contact person at ICRH:	Sara De Meyer saraa.demeyer@ugent.be Peter Decat peter.decat@ugent.be

The project aims to improve the quality of primary health care in Nicaragua. The pivotal theme of the project is reproductive health care delivery in primary health services. In 2012 health providers and medical students received training in doctor-patient communication, conflict management and the rational use of medicines. Two Nicaraguan docents from the faculty of Medicine and the nursery department came on scholarships to Belgium and were trained in provider-patient communication skills based on the guide of Calgary Cambridge. An online course on provider-patient communication is in progress. The target audience are physicians and other caregivers in Latin America. The tool comprises video clips of consultations, theoretical background and exercises. The research data collected during previous project years have been further processed and will result in at least three articles related to doctor-patient communication and the quality of care in primary health centers.

Workshop on provider-patient communication, role play.

4.2 OTHER ACTIVITIES OF THE HEALTH SYSTEMS TEAM

4.2.1 Be-cause Health People Centred Care working group (PCC WG)

ICRH is an active member of Be-cause health, an informal and pluralistic Belgian platform which is open to institutional and individual members that are involved in international health issues. The health systems team presides within Be-cause health the working group about people centred care (PCC).
On 29 November 2012 an international conference 'People Centred care: ways towards individual and collective wellbeing in North and South' was organized by ICRH and the PCC working group. The objective was to exchange ideas and best practices between health care workers in the North and South and to come up with solutions that really meet the needs of the people. Because the health and the well-being of all people are still the central goal of health care. Health systems therefore need to change and take on a more holistic and people centred approach. But how to put that into practice? What are preconditions and obstacles? Are there positive experiences to learn from? These and many more questions were tackled in the different sessions of this one-day seminar focusing on formulating recommendations for achieving more people centred health systems, striving for both individual and collective wellbeing at an operational and organizational level. (see www.be-causehealth.be).
Contact person at ICRH: Peter Decat, peter.decat@ugent.be

5. Activities of the HPV/cervical cancer team

The HPV/cervical cancer research line comprises researchers from ICRH Belgium, involved in Human Papilloma Virus (HPV) research, as well as 2 guest faculty members (prof. Dr Bogers, UA; Dr Marc Arbyn, IPH) are working within the topic of HPV/cervical cancer. The objectives of the team include coordination of research activities in the field of HPV/cervical cancer in Belgium, but also in Kenya.

5.1 PROJECTS

5.1.1 Surveillance of HPV infections and HPV related disease subsequent to the introduction of HPV vaccination in Belgium (SEHIB)

Financed by:	Sanofi Pasteur	
Coordinator:	ICRH Belgium	
Partners:		
Belgian University Hospitals		Belgium
Labo Riatol		Belgium
Institute for Public Health		Belgium
Budget:	1,007,555 EUR	
Start date:	December 2009	
End date:	March 2014	
Contact person at ICRH:	Davy Vanden Broeck Davy.vandenbroeck@ugent.be	

The introduction of the HPV vaccine could lead to a change in the distribution of HPV types in the population. The vaccine includes the types 16 and 18 which are causing the majority of all cervical cancers (app. 70%). There is a possibility that these could be replaced by other types which are also carcinogenic and which are currently not covered by the vaccine. Therefore monitoring and surveillance of the HPV type distribution after the introduction of the vaccine is necessary. In addition, cross-protection (protection against disease associated with types other than the vaccine types but related to them) will result in a protection of the vaccinated population that is greater than expected. Detailed surveillance can help to disentangle these possible effects. The current study is in line with the request of the European Medicines Agency (EMA) to investigate the HPV type-specific prevalence and the potential non-vaccine type replacement in the post-vaccine era in non-Nordic EU member states.
This population-based, cross-sectional study has a duration of 4 years. Study samples are collected from women between 18 and 64 years of age, attending cervical cancer screening in 5 university and 4 periphery centres. The main objectives of the study are to assess the HPV vaccination status in the study population, to estimate the crude and age-standardized prevalence of HPV infection and of cytological cervical lesions in both the vaccinated and the general study population and to study the correlation between HPV vaccination status and cytological and histological findings. Furthermore, the detection rate of cytology for histological confirmed lesions, the correlation between HPV type infection and cytological and histological findings and the impact of HPV vaccination on the correlation of HPV infection and cytology/histology are being studied.

5.1.2 HPV/BV interaction

Financed by:	FWO
Coordinator:	ICRH Belgium
Partners:	
ICRH Kenya	Kenya
Budget:	234,000 EUR
Start date:	October 2008
End date:	September 2014
Contact person at ICRH:	Davy Vanden Broeck Davy.vandenbroeck@ugent.be

Bacterial vaginosis (BV) has been described to be an important cofactor in acquisition of several STIs. Alterations of the vaginal flora are more frequently found in an African population, and this could also contribute to the higher prevalence of STIs and related disease in Sub-Saharan Africa. Regarding HPV and related cervical cancer, the relationship BV/VPV remains less clear, with contradicting scientific evidence, and even lacking evidence for the African continent.
This research aims to investigate the relationship of HPV and BV, focusing on African women. Via meta-analysis, potential associations on existing data will be investigated. Furthermore, a nested cross-sectional study will enrol women with BV and confirm HPV infection in this population (Mombasa, Kenya). These samples are subjected to state-of-the-art laboratory techniques, to unravel potential underlying cell biological reasons. In cervico-vaginal samples, obtained from women with and without HPV infection, differentially expressed proteins will be detected and their functionality investigated.
Preliminary results show indeed a positive correlation between BV and HPV and BV and cervical lesions. Data on African women are being collected and laboratory methods have been prepared.

5.1.3 Cervical cancer prevention in Kenya: Introduction of the HPV vaccines

Financed by:	Fund for Scientific Research Flanders, FWO
Coordinator:	ICRH Belgium
Partners:	
Moi University	Kenya
ICRH Kenia	Kenya
Budget:	180,000 EUR
Start date:	1 October 2010
End date:	30 June 2014
Contact person at ICRH:	Heleen Vermandere Heleen.vermandere@ugent.be

In Kenya, HPV vaccination is not part of the national immunization scheme. The 2 types of HPV-vaccines are however approved and allowed to use in the country. Dr Hillary Mabeya, National Advisor on Adolescent Vaccination at the Ministry of Health (Kenya), received a grant of 9600 HPV vaccines from the

GARDASIL Access Program in order to pilot HPV vaccination. The pilot program started in 2012, focusing on completion of the vaccination scheme (3 doses in 6 months) and the possible occurrence of adverse effects. Primary school girls (standard 4 to 9, i.e. approximately 9 to 14 years of age) enrolled in 10 randomly selected public schools were the first target group, but in a second phase the program was opened for young girls from the whole community.
Through interviewing mothers before and after the vaccination programme, we study and evaluate the introduction of the HPV vaccines in Kenya. The objectives are:

- To measure the acceptability, intention and behaviour towards HPV vaccination in Kenya
- To define the impact of referents' opinions, and the impact of personal, socio-cultural and structural factors on the decision regarding HPV vaccination of young girls.
- To assess the willingness-to-pay for HPV vaccines
- To generate achievable recommendations on how to design, implement and promote HPV vaccination in Kenya

Ethical approval for the pre-vaccination survey was obtained from Ghent University and Moi University in January and March 2012, respectively. Interviewers were trained and baseline data was collected. During the interview, the mothers received essential information regarding cervical cancer and HPV-infections in order to make decisions based on correct and actual facts. Inviting potential participants was done through invitation letters given to girls at school, after selecting them randomly from class lists. Of all invited mothers, 61% (287/472) agreed to be interviewed. After the data-collection, all data was entered in Epi-info and cleaning and analysis was done in Stata11. Preliminary results show high acceptability and intention-to-vaccinate among most of all respondents, 88% and 86% respectively. A poster of the pre-vaccination survey was presented at the International Papillomavirus Conference in December 2012.

5.1.4 Vertical transmission of HPV

Financed by:	Ghent University	
Coordinator:	ICRH Belgium	
Partners:		
Free University of Brussels (VUB)		Belgium
Budget:	-	
Start date:	01/10/2010	
End date:	30/09/2015	
Contact person at ICRH:	Davy Vanden Broeck Davy.vandenbroeck@ugent.be	

HPV is a very common, sexually transmitted virus; the lifetime incidence is estimated to be as high as 80% (Einstein, 2009). Until relatively recently, it was generally assumed that HPV infection and related diseases in children was due to sexual abuse. This paradigm, however, has been changed over the past decade. Children with no history of sexual abuse can equally suffer from HPV related diseases, the latter presumably including: skin and anogenital warts, oral papillomas and recurrent respiratory papillomatosis. Data on HPV infection in children, including new-borns, is slowly becoming available. The extent to which HPV and HPV related diseases in minors can be found, remains however ambiguous.

Prevalence rates of HPV infections ranging from 0% up to 70% have been described in the recent literature. Factors contributing to this extremely large range potentially include technical limitations; some studies were conducted when optimal HPV detection (PCR based) was not readily available and probably resulted in false negative outcomes.
Towards infection of a child, the route of effective infection with HPV remains still unclear. Suggested is that infection can occur in a vertical manner, i.e. in utero and during birth, but also an important contribution of horizontal transmission, e.g. during nursing or breastfeeding cannot be excluded. The existence of new and better techniques will now make it possible to find clear answers regarding mother-to-child-transmission (MTCT) of HPV and its prevalence.

The objectives of the study are to determine HPV type specific prevalence in different sample sites, including amniotic fluid, vaginal swab, placenta and breast milk, and to elucidate MTCT of HPV during pregnancy, delivery and breastfeeding.

Activities in 2012 included a literature review, the publication of a meta-analysis (Merckx et al., 2012), the collection of milk samples and the composition an analysis of a database with genotype prevalence data.

5.1.5 Evolution of human papillomavirus infection in pregnant women infected with human immunodeficiency virus

Financed by:	-
Coordinator:	ICRH Belgium
Partners:	
ICRH Kenya	Kenya
Budget:	20,000 EUR
Start date:	01/02/2011
End date:	31/01/2013
Contact person at ICRH:	Davy Vanden Broeck Davy.vandenbroeck@ugent.be

Human papillomavirus (HPV) infection is the main etiological factor for cervical cancer, the second most common cancer in women worldwide. In immune compromised women, such as human immunodeficiency virus infected (HIV) patients, HPV infection displays a different natural history with a faster disease progression, more and higher grade disease, and with less efficient response to treatment. Furthermore, pregnant women have been proven to be at higher risk to develop HPV related cervical lesions. In addition, the effect of HAART on HPV infection is still a matter of debate. The combination of both immune suppression, different regimens of HAART, and pregnancy is largely unknown, hence the topic of this research proposal.

The overall objective of this study is to gain insight in HPV co-infection in HIV positive pregnant women.
Specific objectives include the determination of the prevalence of type-specific HPV infections in HIV positive women during pregnancy and at 3 months postpartum, and the assessment of the influence of

different HAART regimens on clearance of HPV infection and of the relationship between CD4 cell count and genotype specific HPV infection. A total of 250 participants from the Kesho Bora Mombasa study site who had 2 cervicovaginal samples taken; one during pregnancy and one at three months postpartum were selected for HPV genotyping. The sample is a convenience sample from a large multi-country, multi-centre interventional study.

HPV genotyping started in July 2011 at the International Centre for Reproductive Health laboratory in Kenya and is currently on-going. A total of 250 samples taken during pregnancy have been analysed and results interpreted. The next batch of 250 samples will be completed in the first quarter of 2012. Thereafter data entry, cleaning and analysis up to the end of March 2012 when the first daft will be available. First publication is planned for the second half of 2012, other manuscripts will be presented for publication end 2012, early 2013.

5.2 OTHER ACTIVITIES OF THE HPV/CERVICAL CANCER TEAM

5.2.1 ICRH-UZ Ghent HPV platform

The launch of an HPV research platform has provided researchers from Ghent University and the University Hospital a forum to discuss and harmonize their research activities in the field of cervical cancer/HPV research. Next to colleagues from Ghent, also partners from Antwerp University and the national Institute for Public health join the meetings. The main goal of the platform is to streamline existing research efforts and to launch new projects.

Contact person at ICRH: Davy Vanden Broeck, Heleen Vermandere

5.2.2 VLIR-Moi IUC collaboration

Within a long-lasting collaboration between VLIR-UOS and the Moi University (Eldoret, Kenya), an important section is dedicated to reproductive health and focuses on HPV research. Not only will Heleen Vermandere do her PhD research within this setting, also a Kenyan PhD student will investigate the impact of cervical cancer at the social level. in 2012, the collaboration was setup and in total 3 PhD Projects initiated.

Contact person at ICRH: Davy Vanden Broeck, Heleen Vermandere

5.2.3 Capacity building HPV genotyping ICRHK

In order to perform HPV genotyping for the various on-going projects in Kenya, ICRH Kenya staff has been trained to perform HPV genotyping assays. This capacity will allow efficient sample analysis on the ground and this capacity has been nationwide recognized. Indeed, other researchers have requested ICRHK service to facilitate sample analysis. Future planning includes introduction of an in-house pre-screening, prior to HPV genotyping.

Contact person at ICRH: Davy Vanden Broeck, Rita Verhelst

6. Non-team related activities

6.1 FWO international coordination

Financed by:	Research Foundation Flanders
Coordinator:	ICRH Belgium
Budget:	208,800 EUR
Start date:	1 January 2012
End date:	31 December 2014
Contact person at ICRH:	Dirk Van Braeckel dirk.vanbraeckel@ugent.be

The Research Foundation Flanders supports the International Research Network of ICRH 'WHO Collaborating Centre for Research on Sexual and Reproductive Health'. The aim of this network is to provide technical and logistical support for:
- operational and applied research,
- the design, planning, implementation, monitoring and evaluation of reproductive health programmes,
- established and new networks
- training
- policy dialogue and advocacy.

6.2 Institutional University Cooperation Programme with the University Eduardo Mondlane of Mozambique (DESAFIO)

Financed by:	Belgian Development Cooperation through the Flemish Interuniversity Council - University Cooperation for Development (VLIR-UOS)
Coordinator:	ICRH Belgium

Partners:	
University Eduardo Mondlane	Mozambique
Ghent University	Belgium
University of Antwerp	Belgium
Vrije Universiteit Brussel	Belgium
Katholieke Universiteit Leuven	Belgium
Hasselt University	Belgium

Budget (phase 1):	3,480,000 EUR
Start date (phase 1):	1 April 2008
End date (phase 1):	31 March 2013
Contact persons at ICRH:	Olivier Degomme (olivier.degomme@ugent.be)

ICRH is coordinating the VLIR-UOS-funded Institutional University Cooperation (IUC) Programme with the University Eduardo Mondlane (UEM) of Mozambique. The programme, called DESAFIO, has the objective to strengthen UEM as a developmental actor in Mozambican society in the area of sexual and reproductive health and rights (SRHR) and HIV/AIDS. It is based on a long term collaboration between UEM and all Flemish universities, comprising a two-years preparatory pre-partner programme and two five-years partner programmes. The programme consists of eight projects. Five projects address a sub-theme of the central theme (human rights, social rights, gender and family health, reproductive health, and HIV/AIDS and STI) and three cross-cutting projects strengthen capacity in specific areas. Activities include conducting joint research in the different areas of reproductive health and HIV/AIDS; enhancing the capacity of UEM academic staff through training, including master and PhD degrees; strengthening UEM's training capacity by developing master courses; strengthening teaching and research skills, ICT, library sciences, academic English and biostatistics at UEM; and conducting community-based outreach activities. During 2012, the fourth year of the Partner Programme was successfully completed and the fifth and final year of the first phase was started. At the same time, the Partnership Programme for the second phase (2013-2018) was successfully submitted to VLIR-UOS. Due to Marleen Temmerman's move to the World Health Organization, she has been replaced by prof Martin Valcke (UGhent) as overall coordinator for the Belgian partners. ICRH however remains the day-to-day Flemish coordinating office with Olivier Degomme in the capacity of assistant-coordinator.

6.3 Focusing on medical health problems in (post)conflict situations

Financed by:	Flemish Interuniversity Council
Coordinator:	ICRH Belgium
Partners:	
Université Catholique de Bukavu	Democratic Republic of Congo
Budget:	252,871 euro
Start date:	April 2011
End date:	April 2013
Contact person at ICRH:	Steven Callens steven.callens@ugent.be

Several years of recurrent conflict in the Congo have ended up destroying the health system of the Republic of Congo (DRC) in general, but particularly the South Kivu Province, resulting in: (1) Rising rates of mother and child morbidity. The fight against diseases of reproductive health is a priority of the Congolese government in the process of reconstruction in post-conflict. (2) An increase in chronic non-communicable diseases during this decade. In the first year this project focused on the integration within the faculty of medicine of the Catholic University of Bukavu. Particular attention will be focused on building strategic relationships between sub-disciplines of medical school and the newly established school of public health. A document with a strategic vision and mandate of the Research Office will be prepared after consultation between the sub-disciplines of medicine, the rector and the university authorities.

The research focus will be placed on finding suitable sites for cohorts to be followed longitudinally in rural and urban areas. The scientific focus is on chronic non-communicable diseases. Finally, there is a project on sexual health, where we first examine the use of traditional methods of family planning. Particular attention will be given to traditional methods potentially dangerous to the health of women and barriers to using modern methods. It will also examine which of the modern methods of family planning are acceptable and economically viable in the long term.

6.4 Millennium development goals campaign: '2015 – time is running'

ICRH is member of the coalition of Flemish development NGOs '2015 – de tijd loopt' ('2015 – time is running'). This coalition aims at keeping the millennium development goals (MDG) on the public and the political agenda. In 2012, the activities of the coalition focused the position of the Belgian government in the Rio+20 and the post MDG processes.

6.5 Ghent Africa Platform

ICRH is an active member of the Ghent Africa Platform (GAP). GAP is an umbrella organisation of several, sometimes very diverse, 'actors' belonging to the Ghent University Association, that focus on the African continent. it offers a forum within which they can intensify mutual contacts, get to know and discuss their collective, interdisciplinary interests and possibly turn this into joint research, publications and/or the implementation of these within the scope of development aid. On 7 December 2012 GAP organized its sixth annual symposium: **'**Africa: (post-)development?'. ICRH was, as a core member of the Platform, a co-organizer of the symposium and was represented in the scientific committee.

6.6 Intercultural Women Network 'Oog in Oog'

Since 2011, ICRH participates in the Intercultural Women Network 'Oog in Oog'. This network is a collaboration of more than twenty organizations, all active in Ghent and the Province of East-Flanders and working on the topic of gender. Besides ICRH, representatives of the city of Ghent, of the Province of East-Flanders and of migrant- women- and homosexual and lesbian organizations participate. Together, they realize different activities. In 2012 they organized, among others, an intercultural event on 11 March to celebrate the International Women's Day and a lunchmeeting on pregnancy and violence presented by ICRH collaborator An-Sofie Van Parys.
Website network: http://ooginoog.be/
For more information: SaraA.demeyer@Ugent.be

6.7 LuMIMA

On May 10th 2012 ICRH organized the interactive event LUMIMA, an information and sensitization initiative within the framework of the Belgian Development Days. LUMIMA started with 'Think & Taste', an information market about the Millennium Development Goals 4 & 5 (reducing child mortality and improving maternal health). Various organizations working in the field were present such as Doctors without Borders, Handicap International, Amnesty International, FOS, UNICEF and more. The following speakers gave a presentation on topics related to child- and maternal health: Prof Dr Temmerman (Senator and director ICRH), Dr Annelies Verdoolaege (Ghent Africa Platform), Fadumo Abdi Nasir (testimony FGM), Ivan Hermans (UNFPA), Yves Kluyskens (Katako-Kombe) and Eva de Plecker and Daphne Lagrou (Doctors without borders). 'Think & Taste' mainly aimed at students and staff of the Association of Ghent University but also other enthusiasts were present. During the afternoon expositions and videos were shown and Jim Cole and Sherman provided a musical touch. In the evening, Lieven Scheire started the presentation of a big 'MD4 MD5-quiz' in which more than 400 people participated. In the finals Joetz vzw challenged a group of eminent professors and celebrities among whom Prof Temmerman, Daniel Termont (Mayor of Ghent), Prof Dr Rik Torfs (Canon Law and senator), Tom Coenye (elected 'the coolest professor of Ghent University 2012') and Laura Beyne (Miss Belgium 2012) and won the first price: a trip to Kenya. In June 2012 they travelled to Mombasa to visit ICRH Kenya projects related to child and maternal health. Their impressions are available in an online diary on the LuMIMA webpage: http://www.icrh.org/lumima

6.8 Particia Claeys award

Prof. Patricia Claeys was for many years the executive director of the ICRH and an inspiring friend and colleague. She passed away far too early. In her memory, ICRH has instituted a yearly 'Patricia Claeys Award', which was presented for the first time in June 2012.

ICRH offers the 'Patricia Claeys Award' annually to a health sciences student who shows a remarkable interest and commitment for international health. This year, the jury selected Nele Rasschaert, graduate in Medicine. The Award was handed over by Patricia's daughters, Ruth and Sarah, during the graduate ceremony. In his laudatio, Prof. Guy Vanderstraeten, Dean of the Faculty of Medicine and Health Sciences and Chairman of the Patricia Claeys Award Jury , praised the high quality thesis that Nele wrote together with Eline Scheire on provider-patient communication in Nicaragua. In addition, he commended Nele's commitment for international health in the Belgian Medical Students' Associations.

The jury was also impressed by the vision text that Nele wrote on academic international cooperation, in which she stated: 'It goes beyond doing research in an international context. It is about the spirit to look over the wall and to become a bit the other'.

Publications

1. Articles in journals included in the Science Citation Index, Social Sciences Citation Index, Arts and Humanities Citation Index. (A1)

1. Richter M, Chersich MF, Vearey J, Sartorius B, Temmerman M, Luchters S. Migration status, work conditions and health utilization of female sex workers in three South African cities. J Immigr Minor Health 2012

ABSTRACT

Intersections between migration and sex work are underexplored in southern Africa, a region with high internal and cross-border population mobility, and HIV prevalence. Sex work often constitutes an important livelihood activity for migrant women. In 2010, sex workers trained as interviewers conducted cross-sectional surveys with 1,653 female sex workers in Johannesburg (Hillbrow and Sandton), Rustenburg and Cape Town. Most (85.3 %) sex workers were migrants (1396/1636): 39.0 % (638/1636) internal and 46.3 % (758/1636) cross-border. Cross-border migrants had higher education levels, predominately worked part-time, mainly at indoor venues, and earned more per client than other groups. They, however, had 41 % lower health service contact (adjusted odds ratio = 0.59; 95 % confidence interval = 0.40-0.86) and less frequent condom use than non-migrants. Police interaction was similar. Cross-border migrants appear more tenacious in certain aspects of sex work, but require increased health service contact. Migrant-sensitive, sex work-specific health care and health education are needed.

2. Muraguri N, Temmerman M, Geibel S. A decade of research involving men who have sex with men in sub-Saharan Africa: Current knowledge and future directions. SAHARA J 2012;9(3):137-47. (IF: 0.810)

ABSTRACT

It has been just over 10 years since the first large behavioral survey of men who have sex with men (MSM) was implemented in Senegal in 2001. Since then, behavioral and/or HIV prevalence surveys have been conducted in over 14 other countries in sub-Saharan Africa. Current available evidence and review have established that HIV prevalence among MSM in these countries are significantly higher than corresponding general populations, that MSM engage in sexual risk behaviors that place them and sexual partners at higher risk, and that issues of discrimination and stigmatization inhibit HIV interventions for MSM. This paper summarizes the existing knowledge, describes limitations of this evidence, and proposes new and enhanced research approaches to fulfill needed gaps to inform national HIV responses for MSM populations.

3. ***Zhang XD, Temmerman M, Li Y, Luo W, Luchters S. Vulnerabilities health needs and predictors of high-risk sexual behaviour among female adolescent sex workers in Kunming, China. Sex Transm Infect 2012***

OBJECTIVES:

This study assessed social and behavioural predictors for sexual risk taking and sexually transmitted infections (STIs) including HIV among adolescent female sex workers (FSWs) from Kunming, China. Additionally, health services needs and use were assessed.

METHODS:

A cross-sectional survey was conducted in 2010. Using snowball and convenience sampling, self-identified FSWs were recruited from four urban areas in Kunming. Women consenting to participate were administered a semi-structured questionnaire by trained interviewers identified from local peer-support organisations. Following interview, a gynaecological examination and biological sampling to identify potential STIs were undertaken. Descriptive and multivariable logistic regression analyses were performed.

RESULTS:

Adolescent FSWs had a mean age of 18.2 years and reported numerous non-paying sexual partners with very low rate of consistent condom use (22.2%). Half (50.3%) the respondents had sex while feeling drunk at least once in

the past week, of whom 56.4% did not use condom protection. STI prevalence was high overall (30.4%) among this group. Younger age, early sexual debut, being isolated from schools and family, short duration in sex work, and use of illicit drugs were found to be strong predictors for unprotected sex and presence of an STI. Conversely, having access to condom promotion, free HIV counselling and testing, and peer education were associated with less unprotected sex. The majority reported a need for health knowledge, free condoms and low-cost STI diagnosis and treatment.

CONCLUSIONS:

There is an urgent need to improve coverage, accessibility and efficiency of existing interventions targeting adolescent FSWs

4. ***Klot JF, Auerbach JD, Veronese F, Brown G, Pei A, Wira CR, Hope TJ, M'boup S, Greentree Meeting on Sexual Violence and HIV. Greentree white paper: sexual violence, genitoanal injury, and HIV: priorities for research, policy and practice. AIDS Res Hom Retroviruses 2012;28(11):1379-88. (IF: 2.246)***

ABSTRACT

The links between sexual violence, genitoanal injury, and HIV are understudied but potentially significant for understanding the epidemic's disproportionate impacts on young women and girls, particularly in sub-Saharan Africa, other hyperendemic areas, and conflict-affected regions. A Scientific Research Planning Meeting was convened by the Social Science Research Council at the Greentree Foundation in New York, March 19-20, 2012, bringing together an interdisciplinary group of researchers, clinicians, and policy makers to identify knowledge needs and gaps in three key areas: (1) the role of genitoanal injury on HIV transmission, acquisition, and pathogenesis; (2) the influence of sex and age-related anatomic characteristics on HIV transmission, acquisition, and pathogenesis; and (3) the role of heterosexual anal intercourse in HIV transmission. This article reflects the consensus that emerged from the Greentree Meeting regarding priority scientific research questions in these three areas, associated data collection and measurement challenges and opportunities, and implications for policy and practice.

5. ***Tency I, Verstraelen H, Kroes I, Holtappels L, Verhasselt B, Vaneechoutte M, Verhelst R, Temmerman M. Imbalances between matrix metalloproteinases (MMPs) and tissue inhibitor of metalloproteinases (TIMPs) in maternal serum during preterm labor. PLoS One 2012;7(11):e49042. (IF: 4.092)***

BACKGROUND:

Matrix metalloproteinases (MMPs) are involved in remodeling of the extracellular matrix (ECM) during pregnancy and parturition. Aberrant ECM degradation by MMPs or an imbalance between MMPs and their tissue inhibitors (TIMPs) have been implicated in the pathogenesis of preterm labor, however few studies have investigated MMPs or TIMPs in maternal serum. Therefore, the purpose of this study was to determine serum concentrations of MMP-3, MMP-9 and all four TIMPs as well as MMP:TIMP ratios during term and preterm labor.

METHODS:

A case control study with 166 singleton pregnancies, divided into four groups: (1) women with preterm birth, delivering before 34 weeks (PTB); (2) gestational age (GA) matched controls, not in preterm labor; (3) women at term in labor and (4) at term not in labor. MMP and TIMP concentrations were measured using Luminex technology.

RESULTS:

MMP-9 and TIMP-4 concentrations were higher in women with PTB vs. GA matched controls (resp. $p = 0.01$ and $p<0.001$). An increase in MMP-9:TIMP-1 and MMP-9:TIMP-2 ratio was observed in women with PTB compared to GA matched controls (resp. $p = 0.02$ and $p<0.001$) as well as compared to women at term in labor (resp. $p = 0.006$ and $p<0.001$). Multiple regression results with groups recoded as three key covariates showed significantly higher MMP-9 concentrations, higher MMP-9:TIMP-1 and MMP-9:TIMP-2 ratios and lower TIMP-1 and -2 concentrations for preterm labor. Significantly higher MMP-9 and TIMP-4 concentrations and MMP-9:TIMP-2 ratios were observed for labor.

CONCLUSIONS:

Serum MMP-9:TIMP-1 and MMP-9:TIMP-2 balances are tilting in favor of gelatinolysis during preterm labor. TIMP-1

and -2 concentrations were lower in preterm gestation, irrespective of labor, while TIMP-4 concentrations were raised in labor. These observations suggest that aberrant serum expression of MMP:TIMP ratios and TIMPs reflect pregnancy and labor status, providing a far less invasive method to determine enzymes essential in ECM remodeling during pregnancy and parturition.

6. *Gillet E, Meys JF, Verstraelen H, Verhelst R, De Sutter P, Temmerman M, Vanden Broeck D. Association between bacterial vaginosis and cervical intraepithelial neoplasia; systematic review and meta-analysis. PLoS One 2012;7(10):e45201. (IF: 4.092)*

OBJECTIVE:

Bacterial vaginosis (BV), the most common vaginal disorder among women of reproductive age, has been suggested as co-factor in the development of cervical cancer. Previous studies examining the relationship between BV and cervical intra-epithelial neoplasia (CIN) provided inconsistent and conflicting results. The aim of this study is to clarify the association between these two conditions.

METHODS:

A systematic review and meta-analysis were conducted to summarize published literature on the association between BV and cervical pre-cancerous lesions. An extensive search of electronic databases Medline (Pubmed) and Web of Science was performed. The key words 'bacterial vaginosis' and 'bacterial infections and vaginitis' were used in combination with 'cervical intraepithelial neoplasia', 'squamous intraepithelial lesions', 'cervical lesions', 'cervical dysplasia', and 'cervical screening'. Eligible studies required a clear description of diagnostic methods used for detecting both BV and cervical pre-cancerous lesions. Publications were included if they either reported odds ratios (OR) and corresponding 95% confidence intervals (CI) representing the magnitude of association between these two conditions, or presented data that allowed calculation of the OR.

RESULTS:

Out of 329 articles, 17 cross-sectional and 2 incidence studies were selected. In addition, two studies conducted in The Netherlands, using the national KOPAC system, were retained. After testing for heterogeneity and publication bias, meta-analysis and meta-regression were performed, using a random effects model. Although heterogeneity among studies was high ($\chi(2) = 164.7$, $p<0.01$, $I(2) = 88.5$), a positive association between BV and cervical pre-cancerous lesions was found, with an overall estimated odds ratio of 1.51 (95% CI, 1.24-1.83). Meta-regression analysis could not detect a significant difference between studies based on BV diagnosis, CIN diagnosis or study population.

CONCLUSIONS:

Although most studies were cross-sectional and heterogeneity was high, this meta-analysis confirms a connection between BV and CIN.

7. *Lopes Dos Santos Santiago G, Tency I, Verstraelen H, Verhelst R, Trog M, Temmerman M, Vancoillie L, Decat E, Cools P, Vaneechoutte M. Longitudinal qPCR study of the dynamics of L. crispatus, L. iners, A. vaginae, (sialodase positive) G. vaginalis and P. bivia in the vagina. PLoS One 2012;7(9):e45281. (IF 4.092)*

BACKGROUND:

To obtain more detailed understanding of the causes of disturbance of the vaginal microflora (VMF), a longitudinal study was carried out for 17 women during two menstrual cycles.

METHODS:

Vaginal swabs were obtained daily from 17 non-pregnant, menarchal volunteers. For each woman, Gram stains were scored, the quantitative changes of 5 key vaginal species, i.e. Atopobium vaginae, Lactobacillus crispatus, L. iners, (sialidase positive) Gardnerella vaginalis and Prevotella bivia were quantified with qPCR and hydrogen-peroxide production was assessed on TMB+ agar.

RESULTS:

Women could be divided in 9 subjects with predominantly normal VMF (grades Ia, Ib and Iab, group N) and 8 with predominantly disturbed VMF (grades I-like, II, III and IV, group D). VMF was variable between women, but overall stable for most of the women. Menses were the strongest disturbing factor of the VMF. L. crispatus was present at log7-9 cells/ml in grade Ia, Iab and II VMF, but concentrations declined 100-fold during menses. L. crispatus below

log7 cells/ml corresponded with poor H(2)O(2)-production. L. iners was present at log 10 cells/ml in grade Ib, II and III VMF. Sialidase negative G. vaginalis strains (average log5 cells/ml) were detected in grade I, I-like and IV VMF. In grade II VMF, predominantly a mixture of both sialidase negative and positive G. vaginalis strains (average log9 cells/ml) were present, and predominantly sialidase positive strains in grade III VMF. The presence of A. vaginae (average log9 cells/ml) coincided with grade II and III VMF. P. bivia (log4-8 cells/ml) was mostly present in grade III vaginal microflora. L. iners, G. vaginalis, A. vaginae and P. bivia all increased around menses for group N women, and as such L. iners was considered a member of disturbed VMF.

CONCLUSIONS:

This qPCR-based study confirms largely the results of previous culture-based, microscopy-based and pyrosequencing-based studies.

8. ***Merckx M, Wildero-Van Wouwe L, Arbyn M, Meys J, Weyers S, Temmerman M, Vanden Broeck D. Transmission of carcinogenic human papillomavirus types from mother to child: a meta-analysis of published studies. Eur J Cancer Prev 2012 (IF: 2.130)***

Abstract

Currently, human papillomavirus (HPV) research focuses on HPV infection in adults and sexual transmission. Data on HPV infection in children are slowly becoming available. It is a matter of debate whether mother-to-child transmission of HPV is an important infection route and whether children born to HPV-positive mothers are at a higher risk of HPV infection compared with children born to HPV-negative mothers. The objective of this meta-analysis is to summarize the published literature on the extent to which genital HPV infection is vertically transmitted from mother to child. Medline, Web of Science, and CINAHL were searched for eligible reports published before January 2011. Differences in the risk of HPV infection between newborns from HPV-positive and HPV-negative mothers were pooled using a random-effects model. Twenty eligible studies, including 3128 women/children pairs, fulfilled the selection criteria. High heterogeneity could be found (I=96%). The overall estimated risk difference was 33% (95% confidence interval: 22-44%). On restricting to high-risk HPV-positive mothers only (n=4; women=231), the difference in risk was 45% (95% confidence interval: 33-56%). The heterogeneity was found to be low (I=15%). This meta-analysis indicates a significantly higher risk for children born to HPV-positive mothers to become HPV positive themselves. Plausible explanations include vertical transmission of HPV during pregnancy and/or birth or a higher infection rate during early nursing from mother to child. More research is required to gain an insight into the precise mode of transmission and the clinical effects of infection on the child.

9. ***Richter M, Luchters S, Ndlovu D, Temmerman M, Chersich MF. Female sex work and international sport events – no major changes in demand or supply of paid sex during the 2010 Soccer World Cup: a cross-sectional study. BMC Public Health 2012;12(1):763. IF: 1.997)***

BACKGROUND:

Important unanswered questions remain on the impact of international sporting events on the sex industry. Speculation about increased demand and supply of sex work often generates significant attention, but also additional funding for HIV programmes. This study assessed whether changes occurred in the demand and supply of paid sex during the 2010 Soccer World Cup in South Africa.

METHODS:

Trained sex worker interviewers conducted face-to-face semi-structured interviews among consenting female sex workers during May-September 2010. Using bivariate analyses we compared supply, demand, sexual risk-taking, and police and health services contact pre-World Cup, to levels during the World Cup and after the event.

RESULTS:

No increases were detected in indicators of sex work supply, including the proportion of sex workers newly arrived in the city (< 2.5% in each phase) or those recently entering the trade (≤ 1.5%). Similarly, demand for sex work, indicated by median number of clients (around 12 per week) and amount charged per transaction ($13) remained similar in the three study periods. Only a third of participants reported observing any change in the sex industry ascribed to the World Cup. Self-reported condom-use with clients remained high across all samples (> 92.4% in all

phases). Health-care utilisation decreased non-significantly from the pre- to during World Cup period (62.4% to 57.0%; P = 0.075). Across all periods, about thirty percent of participants had interacted with police in the preceding month, two thirds of whom had negative interactions.
CONCLUSIONS:
Contrary to public opinion, no major increases were detected in the demand or supply of paid sex during the World Cup. Although the study design employed was unable to select population-based samples, these findings do not support the public concern and media speculation prior to the event, but rather signal a missed opportunity for public health action. Given the media attention on sex work, future sporting events offer strategic opportunities to implement services for sex workers and their clients, especially as health service utilisation might decrease in this period.

10. ***Michielsen K, Beauclair R, Delva W, Roelens K, Van Rossem R, Temmerman M. Effectiveness of a peer-led HIV prevention intervention in secondary schools in Rwanda: results from a randomized controlled trial. BMC Public Health 2012;12(1):729. (IF 1.997)***
BACKGROUND:
While the HIV epidemic is levelling off in sub-Saharan Africa, it remains at an unacceptably high level. Young people aged 15-24 years remain particularly vulnerable, resulting in a regional HIV prevalence of 1.4% in young men and 3.3% in young women. This study assesses the effectiveness of a peer-led HIV prevention intervention in secondary schools in Rwanda on young people's sexual behavior, HIV knowledge and attitudes.
METHODS:
In a non-randomized longitudinal controlled trial, fourteen schools were selected in two neighboring districts in Rwanda Bugesera (intervention) and Rwamagana (control). Students (n = 1950) in eight intervention and six control schools participated in three surveys (baseline, six and twelve months in the intervention). Analysis was done using linear and logistic regression using generalized estimation equations adjusted for propensity score.
RESULTS:
The overall retention rate was 72%. Time trends in sexual risk behavior (being sexually active, sex in last six months, condom use at last sex) were not significantly different in students from intervention and control schools, nor was the intervention associated with increased knowledge, perceived severity or perceived susceptibility. It did significantly reduce reported stigma.
CONCLUSIONS:
Analyzing this and other interventions, we identified several reasons for the observed limited effectiveness of peer education: 1) intervention activities (spreading information) are not tuned to objectives (changing behavior); 2) young people prefer receiving HIV information from other sources than peers; 3) outcome indicators are not adequate and the context of the relationship in which sex occurs and the context in which sex occurs is ignored. Effectiveness of peer education may increase through integration in holistic interventions and redefining peer educators' role as focal points for sensitization and referral to experts and services. Finally, we argue that a narrow focus on sexual risks will never significantly turn the tide.

11. ***Shamu S, Abrahams N, Temmerman M, Shefer T, Zarowsky C. 'That pregnancy can bring noise into the family': exploring intimate partner sexual violence during pregnancy in the context of HIV in Zimbabwe. PLoS One 2012;7(8):e43148. (IF 4.092)***
BACKGROUND:
Globally, studies report a high prevalence of intimate partner sexual violence (IPSV) and an association with HIV infection. Despite the criminalisation of IPSV and deliberate sexual HIV infection in Zimbabwe, IPSV remains common. This study explored women's and health workers' perspectives and experiences of sexuality and sexual violence in pregnancy, including in relation to HIV testing.
METHODS:
This qualitative study was part of a larger study of the dynamics of intimate partner violence and HIV in pregnancy in Zimbabwe. Key informant interviews were conducted with health workers and focus group discussions were held with 64 pregnant or nursing mothers attending antenatal and postnatal care clinics in low-income neighbourhoods

of Harare, covering the major thematic areas of validated sexual violence research instruments. Thematic content analysis of audio-recorded and transcribed data was conducted.
RESULTS:
While women reported some positive experiences of sex in pregnancy, most participants commonly experienced coercive sexual practices. They reported that men failed to understand, or refused to accept, pregnancy and its associated emotional changes, and often forced painful and degrading sexual acts on them, usually while the men were under the influence of alcohol or illicit drugs. Men often refused or delayed HIV testing, and participants reported accounts of HIV-positive men not disclosing their status to their partners and deliberately infecting or attempting to infect them. Women's passive acceptance of sexual violence was influenced by advice they received from other females to subordinate to their partners and to not deprive men of their conjugal sexual rights.
CONCLUSIONS:
Cultural and societal factors, unequal gender norms and practices, women's economic vulnerability, and men's failure to understand pregnancy and emotional changes, influence men to perpetrate IPSV, leading to high risk of HIV infection.

12. ***Wangel AM, Schei B, Ryding EL, Ostman M; BIDENS Study Group. Mental health status in pregnancy among native and non-native Swedish-speaking women: a Bidens study. Acta Obstet Gynecol Scand 2012;91(12):1395-401. (IF: 1.771)***
OBJECTIVES:
To describe mental health status in native and non-native Swedish-speaking pregnant women and explore risk factors of depression and posttraumatic stress (PTS) symptoms.
DESIGN AND SETTING:
A cross-sectional questionnaire study was conducted at midwife-based antenatal clinics in Southern Sweden.
SAMPLE:
A non-selected group of women in mid-pregnancy.
METHODS:
Participants completed a questionnaire covering background characteristics, social support, life events, mental health variables and the short Edinburgh Depression Scale.
MAIN OUTCOME MEASURES:
Depressive symptoms during the past week and PTS symptoms during the past year.
RESULTS:
Out of 1003 women, 21.4% reported another language than Swedish as their mother tongue and were defined as non-native. These women were more likely to be younger, have fewer years of education, potential financial problems, and lack of social support. More non-native speakers self-reported depressive, PTS, anxiety and, psychosomatic symptoms, and fewer had had consultations with a psychiatrist or psychologist. Of all women, 13.8% had depressive symptoms defined by Edinburgh Depression Scale 7 or above. Non-native status was associated with statistically increased risks of depressive symptoms and having ≥1 PTS symptom compared with native-speaking women. Multivariate modeling including all selected factors resulted in adjusted odds ratios for depressive symptoms of 1.75 (95% confidence interval: 1.11-2.76) and of 1.56 (95% confidence interval: 1.10-2.34) for PTS symptoms in non-native Swedish speakers.
CONCLUSION:
Non-native Swedish-speaking women had a more unfavorable mental health status than native speakers. In spite of this, non-native speaking women had sought less mental health care.

13. ***Decat P, Zhang WH, Delva W, Moyer E, Cheng Y, Wang ZJ, Lu CY, Wu SZ, Nadisauskiene RJ, Temmerman M, Degomme O. Promoting contraceptive use among female rural-to-urban migrants in Qingdao, China: a comparative impact study of worksite-based interventions. Eur J Contracept Reprod Health Care 2012;17(5):363-72. (IF: 1.456)***
BACKGROUND:
We conducted a comparative study in worksites to assess the impact of sexual health promoting interventions on

contraceptive use among female rural-to-urban migrants.
STUDY DESIGN:
In Qingdao ten manufacturing worksites were randomly allocated to a standard package of interventions (SPI) and an intensive package of interventions (IPI). The interventions ran from July 2008 to January 2009. Cross-sectional surveys at baseline and end line assessed the sexual behaviour of young female migrants. To evaluate the impact of the interventions we assessed pre- and post-time trends.
RESULTS:
From the SPI group 721 (baseline) and 615 (end line) respondents were considered. Out of the IPI group we included 684 and 603 migrants. Among childless migrants, self-reported contraceptive use increased significantly after SPI and IPI (adjusted odds ratio [aOR] = 3.23; 95% confidence interval [CI] = 1.52-6.84; $p < 0.01$ and aOR = 5.81; 95% CI = 2.63-12.80; $p < 0.001$, respectively). Childless migrants older than 22 years reported a greater use after IPI than after SPI.
CONCLUSION:
Implementing current Chinese sexual health promotion programmes at worksites is likely to have a positive impact on migrant women working in the manufacturing industry of Qingdao. More comprehensive interventions seem to have an added value if they are well targeted to specific groups.

14. ***Verstraelen H, Verhelst R, Roelens K, Temmerman M. Antiseptics and disinfectants for the treatment of bacterial vaginosis: a systematic review. BMC Infect Dis 2012;12(1):148. (IF: 3.118)***
BACKGROUND:
The study objective was to assess the available data on efficacy and tolerability of antiseptics and disinfectants in treating bacterial vaginosis (BV).
METHODS:
A systematic search was conducted by consulting PubMed (1966-2010), CINAHL (1982-2010), IPA (1970-2010), and the Cochrane CENTRAL databases. Clinical trials were searched for by the generic names of all antiseptics and disinfectants listed in the Anatomical Therapeutic Chemical (ATC) Classification System under the code D08A. Clinical trials were considered eligible if the efficacy of antiseptics and disinfectants in the treatment of BV was assessed in comparison to placebo or standard antibiotic treatment with metronidazole or clindamycin and if diagnosis of BV relied on standard criteria such as Amsel's and Nugent's criteria.
RESULTS:
A total of 262 articles were found, of which 15 reports on clinical trials were assessed. Of these, four randomised controlled trials (RCTs) were withheld from analysis. Reasons for exclusion were primarily the lack of standard criteria to diagnose BV or to assess cure, and control treatment not involving placebo or standard antibiotic treatment. Risk of bias for the included studies was assessed with the Cochrane Collaboration's tool for assessing risk of bias. Three studies showed non-inferiority of chlorhexidine and polyhexamethylene biguanide compared to metronidazole or clindamycin. One RCT found that a single vaginal douche with hydrogen peroxide was slightly, though significantly less effective than a single oral dose of metronidazole.
CONCLUSION:
The use of antiseptics and disinfectants for the treatment of BV has been poorly studied and most studies are somehow methodologically flawed. There is insufficient evidence at present to advocate the use of these agents, although some studies suggest that some antiseptics may have equal efficacy compared to clindamycin or metronidazole. Further study is warranted with special regard to the long-term efficacy and safety of antiseptics and disinfectants for vaginal use.

15. *Van Braeckel D, Temmerman M, Roelens K, Degomme O. Slowing population growth for wellbeing and development. Lancet 2012;380(9837):84-5. (IF: 38.278)*
ABSTRACT
A growing number of findings from different disciplines show that human wellbeing is increasingly threatened by unsustainable population growth. In their Lancet comment, the authors point out the severe consequences of population growth and unplanned pregnancies in the fields of health, wellbeing and ecology, and call for a major

endeavour to avoid every unwanted pregnancy worldwide. In addition, the authors conclude that scientists,policy makers, and civil society organisations will have to work together to find ways to slow down population growth while fully respecting democracy, human rights, and cultural integrity.

16. ***Jacquemyn Y, Benjahia N, Martens G, Yüksel H, van Egmond K, Temmerman M. Pregnancy outcome of Moroccan and Turkish women in Belgium. Clin Exp Obstet Gyn 2012;39(2):181-5. (IF: 0.429)***

OBJECTIVE:

To compare perinatal outcome in women from Turkish and Moroccan descent versus autochthonous women in Belgium.

METHODS:

Retrospective cohort study, data from an existing database, coupled with sociodemographic data from birth certificates.

RESULTS:

There were more teenage pregnancies in the Moroccan and Turkish group, Moroccan women delivered more frequently after age 40 but Turkish women less frequently. In Moroccan and Turkish women the level of education was lower, they had less hypertension, fewer pregnancies after artificial reproductive technology and preterm deliveries, more diabetes and more grand multiparity. Moroccan women demonstrated more HIV infection. Planned cesarean section was less frequent in the Moroccan and Turkish group, and there was no difference for secondary cesarean section. Belgian women had more induction of labor, instrumental vaginal delivery and epidural anesthesia. There were more babies with low birth weight in both the Moroccan and Turkish group. Moroccan woman had more babies with a birth weight above 4500 g. Total perinatal death rate was higher for Moroccan women while there was no difference between Belgian and Turkish babies.

CONCLUSION:

Moroccan women demonstrated higher rates of HIV infection and perinatal mortality, while in both Turkish and Moroccon women diabetes was higher and hypertension less frequent. Belgian women underwent more interventions during pregnancy.

17. ***Irungu E, Chersich MF, Sanon C, Chege R, Gaillard P, Temmerman M, Read JS, Luchters S, Kesho Bora Study Group. Changes in sexual behavior among HIV-infected women in West and East Africa in the first 24 months after delivery. AIDS 2012;26(8):997-1007. (IF 6.245)***

OBJECTIVE:

Describe changes in sexual behaviour and determinants of unsafe sex among HIV-infected women in the 24 months after delivery.

DESIGN:

Cohort analysis nested within a prevention of mother-to-child transmission trial in Burkina Faso (n = 339) and Kenya (n = 432).

METHODS:

Women were followed during pregnancy and until 12-24 months after delivery. At each visit, structured questionnaires were administered about sexual activity and condom use, and risk-reduction counselling and condoms were provided.

RESULTS:

At study entry, a median 2 months after HIV testing (interquartile range =1-4), 411/770 (53.4%) of women reported partner disclosure, increasing to 284/392 (71.9%) at the final visit. Although most partners were supportive following disclosure, between 5 and 10% of disclosed women experienced hostile or unsupportive partner responses during follow-up visits. At each visit, about a third of sexually active women reported unsafe sex (unprotected sex with HIV-uninfected or unknown status partner). In multivariable logistic regression, unsafe sex was 1.70-fold more likely in Kenyan than in Burkinabe women [95% confidence interval (95% CI) = 1.14-2.54], and in those with less advanced HIV disease or aged 16-24 years. Compared with women who disclosed their status to partners and others, unsafe sex was over six-fold higher in nondisclosers (95% CI = 3.31-12.11), the effect size reducing with increasing disclosure.

CONCLUSION:
HIV-infected women who recently delivered have a high potential for further HIV transmission, especially as HIV discordance is common in Africa. Longitudinal care for women, including positive-prevention interventions, is needed within new services providing antiretroviral prophylaxis during breastfeeding - this repeated interface with services could focus on reducing unsafe sex. Much remains unknown about how to facilitate beneficial disclosure.

18. ***Geibel S, King'ola N, Temmerman M, Luchters S. The impact of pear outreach on HIV knowledge and prevention behaviours of male sex workers in Mombasa, Kenya. Sex Transm Infect 2012;88(5):357-62. (IF 2.854)***
INTRODUCTION:
Targeting most at-risk populations is an essential component of HIV prevention strategies. Peer education programmes have been found to increase HIV knowledge, condom use and safer sex behaviours among female sex workers in Africa and men who have sex with men elsewhere. The authors aimed to evaluate the impact of a peer-driven intervention on male sex workers who sell sex to men in Mombasa, Kenya.
METHODS:
Using time-venue sampling, a baseline survey of 425 male sex workers was conducted in late 2006, after which, 40 peer educators were trained in HIV prevention, basic counselling skills and distribution of condoms and lubricants. A follow-up time-venue survey of 442 male sex workers was conducted in early 2008, and pre- and post-intervention changes were examined. The impact of peer educator exposure on HIV knowledge and condom use was analysed.
RESULTS:
Positive changes in HIV prevention behaviours were observed, including increases in consistent use of condoms with both male clients (35.9%-50.2%, p<0.001) and non-paying male partners (27.4%-39.5%, p=0.008). Exposure to peer educators (AOR=1.97, 95% CI 1.29 to 3.02) and ever having been counselled or tested for HIV (AOR=1.71, 95% CI 1.10 to 2.66) were associated with consistent condom use in multivariate analysis. Peer educator contact was also associated with improved HIV knowledge and use of water-based lubricants.
CONCLUSIONS:
Peer outreach programming reached highly stigmatised male sex workers in Mombasa, resulting in significant, but limited, improvements in HIV knowledge and prevention behaviours. Improved peer coverage and additional prevention initiatives are needed to sufficiently mitigate HIV transmission.

19. ***Kesho Bora Study Group. Maternal HIV-1 disease progression 18-24 months post-delivery according to antiretroviral Prophylaxis regimen (triple-antirertroviral Prophylaxis during pregnancy and breastfeeding versus Zidovudine/single-dose Nevirapine Prophylaxis): The Kesho Bora randomized controlled trial. Clin Infect Dis 2012;55(3):449-60. (IF: 9.154)***
BACKGROUND:
Antiretroviral (ARV) prophylaxis effectively reduces mother-to-child transmission of human immunodeficiency virus type 1 (HIV). However, it is unclear whether stopping ARVs after breastfeeding cessation affects maternal HIV disease progression. We assessed 18-24-month postpartum disease progression risk among women in a randomized trial assessing efficacy and safety of prophylactic maternal ARVs.
METHODS:
From 2005 to 2008, HIV-infected pregnant women with CD4(+) counts of 200-500/mm(3) were randomized to receive either triple ARV (zidovudine, lamivudine, and lopinavir/ritonavir during pregnancy and breastfeeding) or AZT/sdNVP (zidovudine until delivery with single-dose nevirapine without postpartum prophylaxis). Maternal disease progression was defined as the combined endpoint of death, World Health Organization clinical stage 4 disease, or CD4(+) counts of <200/mm(3).
RESULTS:
Among 824 randomized women, 789 had at least 1 study visit after cessation of ARV prophylaxis. Following delivery, progression risk up to 24 months postpartum in the triple ARV arm was significantly lower than in the AZT/sdNVP arm (15.7% vs 28.3%; P = .001), but the risks of progression after cessation of ARV prophylaxis (rather than after delivery) were not different (15.0% vs 13.8% 18 months after ARV cessation). Among women with CD4(+)

counts of 200-349/mm(3) at enrollment, 24.0% (95% confidence interval [CI], 15.7-35.5) progressed with triple ARV, and 23.0% (95% CI, 17.8-29.5) progressed with AZT/sdNVP, whereas few women in either arm (<5%) with initial CD4(+) counts of ≥350/mm(3) progressed.
CONCLUSIONS:
Interrupting prolonged triple ARV prophylaxis had no effect on HIV progression following cessation (compared with AZT/sdNVP). However, women on triple ARV prophylaxis had lower progression risk during the time on triple ARV. Given the high rate of progression among women with CD4(+) cells of <350/mm(3), ARVs should not be discontinued in this group.

20. ***Keygnaert I, Vettenburg N, Temmerman M. Hidden violence is a silent rape: sexual and gender-based violence in refugees, asylum seekers and undocumented migrants in Belgium and the Netherlands. Cult Health Sex 2012;14(5)505-20. (IF: 1.553)***
ABSTRACT
Although women, young people and refugees are vulnerable to sexual and gender-based violence (SGBV) worldwide, little evidence exists concerning SGBV against refugees in Europe. Using community-based participatory research, 223 in-depth interviews were conducted with refugees, asylum seekers and undocumented migrants in Belgium and the Netherlands. Responses were analysed using framework analysis. The majority of the respondents were either personally victimised or knew of a close peer being victimised since their arrival in the European Union. A total of 332 experiences of SGBV were reported, mostly afflicted on them by (ex-)partners or asylum professionals. More than half of the reported violent experiences comprised sexual violence, including rape and sexual exploitation. Results suggest that refugees, asylum seekers and undocumented migrants in Belgium and the Netherlands are extremely vulnerable to violence and, specifically, to sexual violence. Future SGBV preventive measures should consist of rights-based, desirable and participatory interventions, focusing on several socio-ecological levels concurrently.

21. ***Bosmans M, Gonzalez F, Brems E, Temmerman M. Dignity and the right of internally displaced adolescentsin Colombia to sexual and reproductive health. Disasters 2012;doi:10.1111/j.1467-7717.2012.01273.x. (IF: 0.692)***
ABSTRACT
In Colombia, national policies and laws on the protection of vulnerable populations pay specific attention to the sexual and reproductive health needs and rights of internally displaced adolescents. This paper describes how a United Nations Population Fund (UNFPA)-supported programme (September 2000-August 2004) on the sexual and reproductive health of internally displaced adolescents contributed to restoring their dignity as a precursor to promoting their sexual and reproductive health rights. Different forms of the arts were used as basic techniques to discover their body and to provide sexual and reproductive health information and education. The arts were found to play a key role in restoring their dignity. Although dignity appeared to be a determinant of greater awareness of rights, it did not lead to increased empowerment with regard to rights. The availability of and access to sexual and reproductive health services remains a problem and displaced populations continue to have little or no power to hold their authorities accountable.

22. ***Lu C, Xu L, Wu J, Wang Z, Decat P, Zhang WH, Chen Y, Moyer E, Wu S, Minkauskiene M, Van Braeckel D, Temmerman M. Sexual and reproductive health status and related knowledge among female migrant workers in Guangzhou, China: a cross-sectional survey. Eur J Obstet Gynecol Reprod Biol 2012;160(1):60-5. IF: 1.974)***
OBJECTIVE:
The objective of this study was to investigate the current sexual and reproductive health (SRH) status including SRH-related knowledge and associated factors, self-reported symptoms of reproductive tract infection (RTI), medical assistance seeking behavior, sexual experience and contraceptive use, reproductive information approach and reproductive service utilization among female migrant workers in Huangpu district, Guangzhou city, China.
STUDY DESIGN:
A cross-sectional study was conducted in 2008 in eight factories, which were selected randomly from 32 eligible factories in the Huangpu district in Guangzhou. Descriptive statistics were used to describe the SRH status of

migrant workers. Factors associated with the level of SRH knowledge were determined by a logistic regression model.
RESULTS:
Of 1346 female migrant workers, 831(61.7%) were unmarried and 515 (38.3%) were married. 27.2% of the unmarried respondents and 40.2% of the married respondents had suffered self-reported RTI symptoms. Among unmarried respondents, the median knowledge score was 5 points, compared to 8 points for the married. For unmarried migrant workers, factors associated with the knowledge level were age, education level, access to SRH information and service, sexual experiences and RTI symptoms. For married migrant workers, factors associated with the knowledge level were age, education level, access to SRH services and RTI symptoms.
CONCLUSIONS:
A high prevalence of self-reported RTI symptoms and a low knowledge level were found among young female migrant workers. Unmarried migrant workers are more vulnerable to SRH problems. Those findings demand more specific interventions targeting female migrants and in particular the unmarried.

23. ***Gissler M, Fronteira I, Jahn A, Karro H, Moreau C, Oliveira da Silva M, Olsen J, Savona-Ventura C, Temmerman M, Hemminki E, the REPROSTAT Group. Terminations of pregnancy in the European Union. BJOG 2012;119(3):324-32. (IF: 3.407)***
OBJECTIVE:
To study the current legislation and trends in terminations of pregnancy in the European Union (EU).
DESIGN:
Data were collected on legislation and statistics for terminations of pregnancy.
SETTING:
Population-based statistics from the EU member states.
POPULATION:
Women in reproductive age in the 27 EU member states.
METHODS:
Information on legislation was collected for all 27 EU member states. Statistical information until 2008 was compiled from international (n = 24) and national sources (n = 17). Statistical data were not available for Austria, Cyprus and Luxembourg.
MAIN OUTCOMES MEASURES:
Terminations of pregnancy per 1000 women aged 15-49 years.
RESULTS:
Ireland, Malta and Poland have restrictive legislation. Luxembourg permits termination of pregnancy on physical and mental health indications; Cyprus, Finland, and the UK further include socio-economic indications. In all other EU member states termination of pregnancy can be performed in early pregnancy on a women's request. In general, the rates of termination of pregnancy have declined in recent years. In total, 10.3 terminations were reported per 1000 women aged 15-49 years in the EU in 2008. The rate was 12.3/1000 for countries requiring a legal indication for termination, and 11.0/1000 for countries allowing termination on request. Northern Europe (10.9/1000) and Central and Eastern Europe (10.8/1000) had higher rates than Southern Europe (8.9/1000). Northern Europe, however, had substantially higher rates of termination of pregnancy among teenagers.
CONCLUSION:
A more consistent and coherent reporting of terminations of pregnancy is needed in the EU. The large variation of termination rates between countries suggests that termination of pregnancy rates may be reduced in some countries without restricting women's access to termination. Sexual education and provision of access to reliable and affordable contraception are essential to achieve low rates of termination of pregnancy.

24. ***Beauclair R, Kassanjee R, Temmerman M, Welte A, Delva W. Age-disparate relationships and implications for STI transmission among young adults in Cape Town, South Africa. Eur J Contracept Reprod Health Care 2012;17(1):30-9. IF: 1.456)***
OBJECTIVES:

To estimate the prevalence of age-disparate (AD) relationships among young black and coloured adults in Cape Town (South Africa) and determine socio-demographic predictors and individual and relationship characteristics of women in these relationships.
METHODS:
A secondary analysis of the Cape Area Panel Study (N = 1960) data was conducted. Descriptive statistics were used to quantify the age-mixing pattern and logistic regression was used to identify significant socio-demographic and behavioural correlates of AD relationships.
RESULTS:
Prevalence of AD relationships was high in both black (36%) and coloured (28%) women. The average age difference between male respondents and their partners increased with age. Young, black women who spent fewer nights under the same roof in one week, had a deceased parent, and were not currently attending classes were more likely to be in an AD relationship. Reports of sexually-transmitted infection (STI) symptoms in the last month and unprotected sex were more common among women in AD relationships.
CONCLUSIONS:
AD relationships are common among young women in Cape Town. Home and family stability is preventative of young women engaging in AD relationships. Therefore, holistic, societal interventions may reduce AD relationships, which are a risk factor for STIs.

25. ***Stroeken K, Remes P, De Koker P, Michielsen K, Van Vossole A, Temmerman M. HIV among out-of-school youth in Eastern and Southern Africa: a review. AIDS Care 2012;24(2):186-94. (IF: 1.603)***
ABSTRACT
The overall decline of the HIV epidemic in Sub-Saharan Africa conceals how the HIV burden has shifted to fall on areas that have been more difficult to reach. This review considers out-of-school youth, a category typically eluding interventions that are school-based. Our review of descriptive studies concentrates on the most affected region, Southern and Eastern Africa, and spans the period between 2000 and 2010. Among the relatively small but increasing number of studies, out-of-school youth was significantly associated with risky sexual behavior (RSB), more precisely with early sexual debut, high levels of partner concurrency, transactional sex, age-mixing, low sexually transmitted infection (STI)/HIV risk perception, a high lifetime number of partners, and inconsistent condom use. Being-in-school not only raises health literacy. The in-school (e.g., age-near) sexual network may also be protective, an effect which the better-studied (and regionally less significant) variable of educational attainment cannot measure. To verify such double effect of being-in-school we need to complement the behavioral research of the past decade with longitudinal cohort analyses that map sexual networks, in various regions.

26. ***Huang C, Soenen SJ, van Gulck E, Vanham G, Rejman J, van Calenbergh S, Vervaet C, Coenye T, Verstraelen H, Temmerman M, Demeester J, De Smedt SC. Electrospun cellulose acetate phthalate fibers for semen induced anti-HIV vaginal drug delivery. Biomaterials 2012;33(3):962-9. (IF: 7.404)***
ABSTRACT
Despite many advances in modern medicine, human immunodeficiency virus (HIV) still affects the health of millions of people world-wide and much effort is put in developing methods to either prevent infection or to eradicate the virus after infection has occurred. Here, we describe the potential use of electrospun cellulose acetate phthalate (CAP) fibers as a tool to prevent HIV transmission. During the electrospinning process, anti-viral drugs can easily be incorporated in CAP fibers. Interestingly, as a result of the pH-dependent solubility of CAP, the fibers are stable in vaginal fluid (the healthy vaginal flora has a pH of below 4.5), whereas the addition of small amounts of human semen (pH between 7.4 and 8.4) immediately dissolves the fibers which results in the release of the encapsulated drugs. The pH-dependent release properties have been carefully studied and we show that the released anti-viral drugs, together with the CAP which has been reported to have intrinsic antimicrobial activity, efficiently neutralize HIV in vitro.

27. ***Dehaene I, Loccufier A, Temmerman M, De Keersmaecker B, De Baene L. Creatine Kinase as an Indicator for Hysterectomy in Postpartum Endomyometritis due to Group A Streptococci: A Hypothesis Illustrated by a Case***

Report. Gynecol Obstet Invest 2012;73(1):82-8. (IF 1.276)

BACKGROUND:

Puerperal group A streptococcus (GAS) infection, once the leading cause of postpartum sepsis, has been increasing again since the 1980s. Streptococcal toxic shock syndrome (STSS) is a serious complication characterized by rapidly spreading GAS infection, shock, and multiple organ failure. Immediate recognition and implementation of therapy is crucial for survival. Making informed decisions regarding surgical debridement, namely hysterectomy, based on clinical indicators is difficult for practitioners.

OBJECTIVES:

This article discusses the potential role of creatine kinase in the decision-making process for treatment of STSS, particularly with regard to hysterectomy.

MATERIAL AND METHODS:

A case report is presented. The literature was searched using the key words 'group A streptococcus', 'postpartum hysterectomy', 'creatine kinase', 'endomyometritis', and 'streptococcal toxic shock syndrome' in PubMed and the UptoDate database. Relevant articles published between 1991 and 2011 were evaluated.

CONCLUSION:

Decisions regarding hysterectomy in STSS management are difficult. A rise in CK levels in the serum may indicate involvement of the myometrium and may be an important parameter in the difficult decision of hysterectomy when treating STSS.

28. Cournil A, De Vincenzi I, Gaillard P, Cecile C, Fao P, Luchters S, Rollins N, Newell ML, Bork K, Read J. Relationship between mortality and feeding modality among children born to HIV-1 infected mothers in a research setting: The Kesho Bora Study. AIDS. 2012 Dec 19. [Epub ahead of print]

OBJECTIVE:: To assess the relationship between infant feeding practices and mortality by 18 months of age among children born to HIV-infected mothers in the Kesho Bora trial (Burkina-Faso, Kenya and South Africa). METHODS:: Enrolled HIV-infected women were counseled to choose between breastfeeding up to six months or replacement feeding from delivery. Multivariable Cox models were used to compare the infant mortality risks according to feeding practices over time defined as never breastfed, weaned or still breastfed. The category 'still breastfed' was disaggregated as exclusively, predominantly or partially breastfed to compare modes of breastfeeding. The relationship between weaning and mortality also was assessed using marginal structural models to control for time-dependent confounders such as maternal or infant morbidity (reverse causality). RESULTS:: Among 795 mothers, 618 (77.7%) initiated breastfeeding. Mortality rates by 18 months among uninfected and infected children were 6% and 38%, respectively. Never breastfed and weaned children were at greater risk of death compared with those still breastfed. Adjusted hazard ratios were 6.7 (95% confidence interval (CI)=2.5-17.9; P < 0.001) and 6.9 (CI = 2.8-17.2; P < 0.001) for never breastfed and weaned children, respectively. Estimation of the effect of weaning using marginal structural models led to similar results. No statistically significant differences were observed according to mode of breastfeeding (exclusive, predominant or partial). CONCLUSIONS:: Within six months after birth, weaned or never breastfed children were at about 7-fold higher risk of dying compared to children who were still breastfed despite a context where interventions were provided to reduce risks associated with replacement feeding.

29. Nyasulu P, Perovic O, Murray J, Luchters S, Chasela C, Koornhof H. Trends and pattern of antimicrobial resistance among blood culture isolates of selected bacterial pathogens in South Africa, 2005-2009. International Journal of Infectious Diseases. 2012;16:e428

30. Jespers V, Menten J, Smet H, Poradosú S, Abdellati S, Verhelst R, Hardy L, Buvé, A, Crucitti T. Quantification of bacterial species of the vaginal microbiome in different groups of women, using nucleic acid amplification tests. BMC Microbiol. 2012 May 30;12:83. doi: 10.1186/1471-2180-12-83.

BACKGROUND:

The vaginal microbiome plays an important role in urogenital health. Quantitative real time Polymerase Chain Reaction (qPCR) assays for the most prevalent vaginal Lactobacillus species and bacterial vaginosis species G.

vaginalis and A. vaginae exist, but qPCR information regarding variation over time is still very limited. We set up qPCR assays for a selection of seven species and defined the temporal variation over three menstrual cycles in a healthy Caucasian population with a normal Nugent score. We also explored
differences in qPCR data between these healthy women and an 'at risk' clinic population of Caucasian, African and Asian women with and without bacterial vaginosis (BV), as defined by the Nugent score.
RESULTS:
Temporal stability of the Lactobacillus species counts was high with L. crispatus counts of 108 copies/mL and L. vaginalis counts of 106 copies/mL. We identified 2 types of 'normal flora' and one 'BV type flora' with latent class analysis on the combined data of all women. The first group was particularly common in women with a normal Nugent score and was characterized by a high frequency of L. crispatus, L. iners, L. jensenii, and L. vaginalis and a correspondingly low frequency of L. gasseri and A. vaginae. The second group was characterized by the predominance of L. gasseri and L. vaginalis and was found most commonly in healthy Caucasian women. The third group was commonest in women with a high Nugent score but was also seen in a subset of African and Asian women with a low Nugent score and was characterized by the absence of Lactobacillus species (except for L. iners) but the presence of G. vaginalis and A. vaginae. CONCLUSIONS: We have shown that the quantification of specific bacteria by qPCR contributes to a better description of the non-BV vaginal microbiome, but we also demonstrated that differences in populations such as risk and ethnicity also have to be taken into account. We believe that our selection of indicator organisms represents a feasible strategy for the assessment of the vaginal microbiome and could be useful for monitoring the microbiome in safety trials of vaginal products.

31. Gerritsen AAM, Michell JS, Johnson SM, Delva W. Challenges with using estimates when calculating ART need among adults in South Africa. S Afr Med J. 2012;102:798-799. (IF: 2.04)
BACKGROUND:
The Foundation for Professional Development (FPD) collects information annually on HIV/AIDS service provision and estimates service needs in the City of Tshwane Metropolitan Municipality (CTMM).
METHODS:
Antiretroviral therapy (ART) data from the Department of Health and Statistics South Africa (SSA) mid-year population estimates were used to approximate the ART need among adults in the CTMM.
RESULTS:
According to SSA data, ART need decreased dramatically from 2010 to 2011 and was lower than the number of adults receiving ART. Although the noted difference was probably due to changes in the calculations by SSA, no detailed or confirmed explanation could be offered.
CONCLUSIONS:
We provide a constructive contribution to the discussion about the use of model-derived estimates of ART need.

32. Mahiane SG, Ouifki R, Brand H, Delva W, Welte A. A General HIV Incidence Inference Scheme Based on Likelihood of Individual Level Data and a Population Renewal Equation. PLoS ONE. 2012;7(9):e44377. (IF: 4.09)
ABSTRACT
We derive a new method to estimate the age specific incidence of an infection with a differential mortality, using individual level infection status data from successive surveys. The method consists of a) an SI-type model to express the incidence rate in terms of the prevalence and its derivatives as well as the difference in mortality rate, and b) a maximum likelihood approach to estimate the prevalence and its derivatives. Estimates can in principle be obtained for any chosen age and time, and no particular assumptions are made about the epidemiological or demographic context. This is in contrast with earlier methods for estimating incidence from prevalence data, which work with aggregated data, and the aggregated effect of demographic and epidemiological rates over the time interval between prevalence surveys. Numerical simulation of HIV epidemics, under the presumption of known excess mortality due to infection, shows improved control of bias and variance, compared to previous methods. Our analysis motivates for a) effort to be applied to obtain accurate estimates of excess mortality rates as a function of age and time among HIV infected individuals and b) use of individual level rather than aggregated data in order to estimate HIV incidence rates at times between two prevalence surveys.

33. Delva W, Eaton JW, Meng F, Fraser C, White RG, Vickerman P, Boily MC, Hallett, TB. HIV Treatment as Prevention: Optimising the Impact of Expanded HIV Treatment Programmes. PLoS Med. 2012;9(7):e1001258. (IF: 16.27)

ABSTRACT

Until now, decisions about how to allocate ART have largely been based on maximising the therapeutic benefit of ART for patients. Since the results of the HPTN 052 study showed efficacy of antiretroviral therapy (ART) in preventing HIV transmission, there has been increased interest in the benefits of ART not only as treatment, but also in prevention. Resources for expanding ART in the short term may be limited, so the question is how to generate the most prevention benefit from realistic potential increases in the availability of ART. Although not a formal systematic review, here we review different ways in which access to ART could be expanded by prioritising access to particular groups based on clinical or behavioural factors. For each group we consider (i) the clinical and epidemiological benefits, (ii) the potential feasibility, acceptability, and equity, and (iii) the affordability and cost-effectiveness of prioritising ART access for that group. In re-evaluating the allocation of ART in light of the new data about ART preventing transmission, the goal should be to create policies that maximise epidemiological and clinical benefit while still being feasible, affordable, acceptable, and equitable.

34. Delva W, Wilson DP, Abu-Raddad L, Gorgens M, Wilson D, Hallett T, Welte A. HIV Treatment as Prevention: Principles of Good HIV Epidemiology Modelling For Public Health Decision-Making in All Modes of Prevention and Evaluation. PLoS Med. 2012;9(7):e1001239. (IF: 16.27)

ABSTRACT

Public health responses to HIV epidemics have long relied on epidemiological modelling analyses to help prospectively project and retrospectively estimate the impact, cost-effectiveness, affordability, and investment returns of interventions, and to help plan the design of evaluations. But translating model output into policy decisions and implementation on the ground is challenged by the differences in background and expectations of modellers and decision-makers. As part of the PLoS Medicine Collection 'Investigating the Impact of Treatment on New HIV Infections'--which focuses on the contribution of modelling to current issues in HIV prevention--we present here principles of 'best practice' for the construction, reporting, and interpretation of HIV epidemiological models for public health decision-making on all aspects of HIV. Aimed at both those who conduct modelling research and those who use modelling results, we hope that the principles described here will become a shared resource that facilitates constructive discussions about the policy implications that emerge from HIV epidemiology modelling results, and that promotes joint understanding between modellers and decision-makers about when modelling is useful as a tool in quantifying HIV epidemiological outcomes and improving prevention programming.

35. HIV Modelling Consortium Treatment as Prevention Editorial Writing Group. HIV Treatment as Prevention: Models, Data and Questions Toward Evidence-based Decision-Making. PLoS Med. 2012;9(7)e1001259. (IF: 16.27)

ABSTRACT

Antiretroviral therapy (ART) for those infected with HIV can prevent onward transmission of infection, but biological efficacy alone is not enough to guide policy decisions about the role of ART in reducing HIV incidence. Epidemiology, economics, demography, statistics, biology, and mathematical modelling will be central in framing key decisions in the optimal use of ART. PLoS Medicine, with the HIV Modelling Consortium, has commissioned a set of articles that examine different aspects of HIV treatment as prevention with a forward-looking research agenda. Interlocking themes across these articles are discussed in this introduction. We hope that this article, and others in the collection, will provide a foundation upon which greater collaborations between disciplines will be formed, and will afford deeper insights into the key factors involved, to help strengthen the support for evidence-based decision-making in HIV prevention.

36. Bellan SE, Pulliam JR, Scott JC, Dushoff J; MMED Organizing Committee. How to make epidemiological training infectious. PLoS Biol. 2012;10(4):e1001295. (IF: 11.45)

ABSTRACT

Modern infectious disease epidemiology builds on two independently developed fields: classical epidemiology and dynamical epidemiology. Over the past decade, integration of the two fields has increased in research practice, but training options within the fields remain distinct with few opportunities for integration in the classroom. The annual Clinic on the Meaningful Modeling of Epidemiological Data (MMED) at the African Institute for Mathematical Sciences has begun to address this gap. MMED offers participants exposure to a broad range of concepts and techniques from both epidemiological traditions. During MMED 2010 we developed a pedagogical approach that bridges the traditional distinction between classical and dynamical epidemiology and can be used at multiple educational levels, from high school to graduate level courses. The approach is hands-on, consisting of a real-time simulation of a stochastic outbreak in course participants, including realistic data reporting, followed by a variety of mathematical and statistical analyses, stemming from both epidemiological traditions. During the exercise, dynamical epidemiologists developed empirical skills such as study design and learned concepts of bias while classical epidemiologists were trained in systems thinking and began to understand epidemics as dynamic nonlinear processes. We believe this type of integrated educational tool will prove extremely valuable in the training of future infectious disease epidemiologists. We also believe that such interdisciplinary training will be critical for local capacity building in analytical epidemiology as Africa continues to produce new cohorts of well-trained mathematicians, statisticians, and scientists. And because the lessons draw on skills and concepts from many fields in biology--from pathogen biology, evolutionary dynamics of host--pathogen interactions, and the ecology of infectious disease to bioinformatics, computational biology, and statistics--this exercise can be incorporated into a broad array of life sciences courses.

37. De Maeseneer J, Van Weel C, Daeren L, Leyns C, Decat P, Boeckxstaens P, Avonts D, Willems S From "patient" to "person" to "people": the need for integrated, people centered health care. The international journal of person centered Medicine 2012, 2(3): 601-614

ABSTRACT

Background and aim

The development of person centred care is based on the principle that each human is a unique autonomous individual, in illness as much as in health. In pursuing health care that is directed at the people the interdependence of the human beings, other living beings and their broader environment comes forward. This paper proposes a theoretical framework which identifies the major elements of people centered care. From this framework "indicator-fields" are deducted and a first exercise to define specific indicators that could be used to assess the "people centeredness" of health systems is made. With this paper we hope to feed the debate on people-oriented care, its components and possible indicators and to contribute to the develop an instrument that assesses the *actual* people centeredness of a health system.

Methods

This paper builds on a literature-based theoretical exploration of the concept, and a series of Delphi-rounds with members of the International Centre for Primary Health Care and Family Medicine – Ghent University, a WHO Collaborating Centre on PHC.

Results

Five themes and subthemes were identified which are essential in the assessment of the people-orientation of care: people centered care is sensitive and respectful for differences while at the same time promoting basic universal rights and values (proportionate universalism); is available, accessible and affordable for all; is directed at the comprehensiveness of health care services; considers relevance and quality aspects of care, such as the responsiveness, adequacy and continuity of health care; and empowers individuals and communities through active involvement and participation. Consequently, possible indicators to measure a system's person centeredness are proposed.

Conclusions

Further systematic review of the literature and empirical research on the development of the theoretical framework and useful indicators are needed to turn this into a robust tool to support health policy setting

38. He D, Zhou Y, Ji N, Wu S, Wang Z, Decat P, Moyer E, Minkauskiene M, Pang C, Cheng Y.Study on sexual and reproductive health behaviors of unmarried female migrants in China. J Obstet Gynaecol Res. 2012 Apr;38(4):632-8.

AIM:

The purpose of this study was to broadly assess the level of knowledge, attitude and behaviors related to sexual and reproductive health (SRH) among unmarried female migrants in China.

MATERIAL AND METHODS:

This cross-sectional study was conducted and a self-administered questionnaire was designed for collecting information on SRH including 15 items for knowledge, 8 items for attitude and some items for contraception and abortion related behaviors.

RESULTS:

A total of 1690 unmarried female migrants were interviewed. Most of the respondents had less knowledge of SRH. Only one-third of respondents was aware of emergency contraceptives and could freely talk about SRH with their friends. Over one-third of respondents were not willing to come into contact with someone with AIDS or STDs. In this study, 10.4% participants had an unwanted pregnancy and 95% of them had an abortion. Multivariate analysis showed that having a boyfriend, duration of employment in city, knowledge on SRH and freely discussing SRH with peer were associated with having premarital sex among these unmarried female migrants.

CONCLUSION:

This study revealed that the unmarried female migrant was one of the most vulnerable groups concerning SRH. In some policy reforms, appropriate and cost-effective SRH services should be provided for these migrants.

39. He D, Cheng YM, Wu SZ, Decat P, Wang ZJ, Minkauskiene M, Moyer E.
Promoting contraceptive use more effectively among unmarried male migrants in construction sites in China: a pilot intervention trial. Asia Pac J Public Health. 2012 Sep;24(5):806-15

ABSTRACT

Poor sexual and reproductive health status has been reported among rural-to-urban migrants in China. Therefore, some effective and feasible interventions are urgently needed. The authors developed a workplace-based intervention to compare 2 young labor migrant service packages (A and B) on the knowledge, attitude related to contraception, and contraceptive use among unmarried male migrants in Chengdu. Fourteen construction sites were randomly assigned to either of the 2 intervention packages. Interventions were completed in 3 months, and data were collected in 2 rounds independently (before and after interventions). After the intervention, the median scores for knowledge and attitude in migrants in package B were significantly higher than in migrants in package A. Although migrants in both packages increased use of condom, the increase was pronounced in migrants in package B, with odds ratio (OR) = 9.65 (95% confidence interval [CI] = 1.41-66.28). The rate of unwanted pregnancies was reduced more significantly in migrants in package B than in migrants in package A (OR = 0.16; 95%CI = 0.03-0.45). Unmarried male migrants who received the comprehensive intervention (package B) were more willing to use condoms and avoid unwanted pregnancies effectively.

2. Articles in international scientific journals, reviewed by international experts not included in the Science Citation Index, Social Sciences Citation Index, Arts and Humanities Citation Index (A2)

1. Geibel S, Luchters S, Temmerman M. Same-sex sexual behavior of men in Kenya: implications for HIV prevention, programs and polivy. Facts Views & Visions in ObGyn 2012;4(4):285-94.

ABSTRACT

Unprotected anal sex has long been recognized as a risk factor for HIV transmission among men who have sex with men (MSM). In Africa, however, general denial of MSM existence and associated stigma discouraged research. To address this gap in the literature, partners conducted the first behavioral surveys of MSM in Kenya. The first study was to assess HIV risk among MSM in Nairobi, and the second study a pre-post intervention study of male sex workers in Mombasa. The 2004 behavioral survey of 500 men in Mombasa revealed that MSM were having multiple sexual partners and failed to access appropriate prevention counseling and care at Kenya clinics. A 2006 capture- recapture enumeration in Mombasa estimated that over 700 male sex workers were active, after which a pre-inter- vention baseline survey of 425 male sex workers was conducted. Awareness of unprotected anal sex as an HIV risk behavior and consistent condom use with clients was low, and use of oil-based lubricants high. Based on this infor- mation, peer educators were trained in HIV prevention, basic counseling skills, and distribution of condoms and lubricants. To assess impact of the interventions, a follow-up survey of 442 male sex workers was implemented in 2008. Exposure to peer educators was significantly associated with increased consistent condom use, improved HIV knowledge, and increased use of water-based lubricants. These results have provided needed information to the Government of Kenya and have informed HIV prevention interventions

2. ***Michielsen K, Chersich M, Temmerman M, Dooms T, Van Rossem R. Nothing as practical as good theory? The theoretical basis of HIV prevention interventions for young people in sub-Saharan Africa: a systematic review. Aids Res Treat 2012;2012:345327.***

ABSTRACT

This paper assesses the extent to which HIV prevention interventions for young people in sub-Saharan Africa are grounded in theory and if theory-based interventions are more effective. Three databases were searched for evaluation studies of HIV prevention interventions for youth. Additional articles were identified on websites of international organisations and through searching references. 34 interventions were included; 25 mentioned the use of theory. Social Cognitive Theory was most prominent (n = 13), followed by Health Belief Model (n = 7), and Theory of Reasoned Action/Planned Behaviour (n = 6). These cognitive behavioural theories assume that cognitions drive sexual behaviour. Reporting on choice and use of theory was low. Only three articles provided information about why a particular theory was selected. Interventions used theory to inform content (n = 13), for evaluation purposes (n = 4) or both (n = 7). No patterns of differential effectiveness could be detected between studies using and not using theory, or according to whether a theory informed content, and/or evaluation. We discuss characteristics of the theories that might account for the limited effectiveness observed, including overreliance on cognitions that likely vary according to type of sexual behaviour and other personal factors, inadequately address interpersonal factors, and failure to account for contextual factors.

3. ***Muvunyi C, Claeys L, De Sutter T, De Sutter P, Temmerman M, Van Renterghem L, Claeys G, Padalko E. Comparison of four serological assays for the diagnosis of of Chlamydia trachomatis in subfertile women. J Infect Dev Ctries 2012;6(5):396-402.***

INTRODUCTION:

Chlamydia antibody testing (CAT) in serum has been introduced as a screening method in the infertility workup. We evaluated the test characteristics of two ELISA tests compared to micro-immunofluorescence tests (MIFs). MIFs are considered the gold standard in the C. trachomatis IgG antibodies detection. We also compared the accuracy of all CAT tests in predicting tubal subfertility, using laparoscopy as a reference.

METHODOLOGY:
Four commercial serological methods were used to analyse 101 serum samples for the presence of C. trachomatis IgG antibodies from patients at the Infertility Clinic of Ghent University Hospital. The diagnostic utility for prediction of tubal infertility of serological methods was evaluated based on patients' medical records.
RESULTS:
A comparison of the serological assays showed little difference in the major performance characteristics: the sensitivities of all MIFs and ELISAs were 100% for all assays (except the ELISA Vircell, with a sensitivity of 90%), and the specificities ranged from 92% for MIF Ani Labsystems to 98% for the MIF Focus and ELISA Vircell. As compared to laparoscopy data, CAT positivity in subfertile women with tubal damage (n=40) did not significantly differ from that of subfertile women without tubal damage (n=61): Positive predictive values (PPV) of CAT ranged from 53% to 60% and negative predictive values (NPV) ranged from 62% to 64%.
CONCLUSION:
evaluated ELISAs are comparable to MIFs in the detection of C. trachomatis IgG antibodies and should be preferred for large serological studies, especially in resource poor settings.

4. ***Doom ECG, Delbaere I, Martens G, Temmerman M. Birth weight for gestational age among Flemish twin population. Facts Views & Visions in ObGyn 2012;4(1):42-9.***
ABSTRACT
Objective: The aim of this study was to develop birth weight references for twins. Mean birth weights of individual twins are lower than those of singletons, hence singleton birth weight curves may not be suitable to assess twin birth weights.
Study design: Twin birth weight curves were developed according to gestational age, gender, parity and mode of conception. The curves are based on population-based data of 40,494 twins born in Flanders, Belgium between 1987 and 2007.
Results: A different growth potential was found comparing the birth weights of twins and singletons. Twins deviate from the singleton curve from 30 weeks gestational age on. Conclusion: Our study underlines that singleton birth weight curves differ from twin birth weight curves. We developed specific twin birth weight curves can be used in clinical practice in order to follow growth patterns of twins in utero.

5. ***Temmerman M, Van Braeckel D, Degomme O. A call for a family planning surge. Facts Views & Visions in ObGyn 2012;4(1):25-9.***
ABSTRACT
In 1994, the International Conference on Population and Development (ICPD) held in Cairo, Egypt, laid out in its Programme of Action an impressive and ambitious set of goals for improving sexual and reproductive health and rights (SRHR) all over the world, by the target date of 2015 (International Conference on Population and Development 1994). One of these goals was the provision of universal access to a full range of safe and reliable family-planning methods. However, notwithstanding increases in budgets for family planning during the years following the ICPD (Organisation for Economic Co-operation and Development), there has been an alarming neglect from the international community for the topic since the year 2000. As a result, the progress made during the second half of the nineties slowed down considerably between 2000 and 2010; in a sense, one could say that ten years were almost wasted! This is astonishing, the more since meeting the need for family planning would have beneficial impacts on public health, environmental sustainability and social and economic development. In this paper, we explore these impacts and urge for a strong renewed commitment of the global community in the form of a global family planning decade.

6. ***Sarna A, Luchters S, Pickett M, Chersich M, Okal J, Geibel S, King'ola N, Temmerman M. Sexual behavior of HIV-positive adults not accessing HIV-treatment in Mombasa, Kenya: defining their prevention needs. AIDS Res Ther 2012;9(1):9.***
BACKGROUND:
HIV spread continues at high rates from infected persons to their sexual partners. In 2009, an estimated 2.6 million

new infections occurred globally. People living with HIV (PLHIV) receiving treatment are in contact with health workers and therefore exposed to prevention messages. By contrast, PLHIV not receiving ART often fall outside the ambit of prevention programs. There is little information on their sexual risk behaviors. This study in Mombasa Kenya therefore explored sexual behaviors of PLHIV not receiving any HIV treatment.

RESULTS:

Using modified targeted snowball sampling, 698 PLHIV were recruited through community health workers and HIV-positive peer counsellors. Of the 59.2% sexually-active PLHIV, 24.5% reported multiple sexual partners. Of all sexual partners, 10.2% were HIV negative, while 74.5% were of unknown HIV status. Overall, unprotected sex occurred in 52% of sexual partnerships; notably with 32% of HIV-negative partners and 54% of partners of unknown HIV status in the last 6 months. Multivariate analysis, controlling for intra-client clustering, showed non-disclosure of HIV status (AOR: 2.38, 95%CI: 1.47-3.84, $p < 0.001$); experiencing moderate levels of perceived stigma (AOR: 2.94, 95%CI: 1.50-5.75, $p = 0.002$); and believing condoms reduce sexual pleasure (AOR: 2.81, 95%CI: 1.60-4.91, $p < 0.001$) were independently associated with unsafe sex. Unsafe sex was also higher in those using contraceptive methods other than condoms (AOR: 5.47, 95%CI: 2.57-11.65, $p < 0.001$); or no method (AOR: 3.99, 95%CI: 2.06-7.75, $p < 0.001$), compared to condom users.

CONCLUSIONS:

High-risk sexual behaviors are common among PLHIV not accessing treatment services, raising the risk of HIV transmission to discordant partners. This population can be identified and reached in the community. Prevention programs need to urgently bring this population into the ambit of prevention and care services. Moreover, beginning HIV treatment earlier might assist in bringing this group into contact with providers and HIV prevention services, and in reducing risk behaviors.

7. *Delbaere I, Cammu H, Martens E, Tency I, Martens G, Temmerman M. Limiting the Caesarean Section rate in low risk pregnancies is key to lowering the trend of increased abdominal deleveries: an observational study. BMC Pregnancy Childbirth 2012;12(1):3.*

BACKGROUND:

As the rate of Caesarean sections (CS) continues to rise in Western countries, it is important to analyze the reasons for this trend and to unravel the underlying motives to perform CS. This research aims to assess the incidence and trend of CS in a population-based birth register in order to identify patient groups with an increasing risk for CS.

METHODS:

Data from the Flemish birth register 'Study Centre for Perinatal Epidemiology' (SPE) were used for this historic control comparison. Caesarean sections (CS) from the year 2000 (N = 10540) were compared with those from the year 2008 (N = 14016). By means of the Robson classification, births by Caesarean section were ordered in 10 groups according to mother - and delivery characteristics.

RESULTS:

Over a period of eight years, the CS rise is most prominent in women with previous sections and in nulliparous women with a term cephalic in spontaneous labor. The proportion of inductions of labor decreases in favor of elective CS, while the ongoing inductions of labor more often end in non-elective CS.

CONCLUSIONS:

In order to turn back the current CS trend, we should focus on low-risk primiparae. Avoiding unnecessary abdominal deliveries in this group will also have a long-term effect, in that the number of repeat CS will be reduced in the future. For the purpose of self-evaluation, peer discussion on the necessity of CS, as well as accurate registration of the main indication for CS are recommended.

8. *Esho T, Enzlin P, Van Wolputte S, Temmerman M. An exploration of the psycho-sexual experiences of women who have undergone female genital cutting : a case of the Maasai in Kenya. FACTS, VIEWS & VISION IN OBGYN,* 4(2) 121-132.

ABSTRACT

The research explored the link between type II Female Genital Cutting (FGC) and sexual functioning. This thesis summary thus draws from an exploratory ethnographic field study carried out among the Maasai

people of Kenya where type II FGC is still being practiced. A purposely sample consisting of 28 women and 19 men, within the ages of 15-80 years took part in individual interviews and 5 focus group discussions. Participants responded to open- ended questions, a method deemed appropriate to elicit insider's in-depth information. The study found out that one of the desired effects of FGC ritual among the Maasai was to reduce women's sexual desire, embodied as tamed sexuality.
This consequence was however not experienced as an impediment to sexual function.
The research es- tablished that esteeming transformational processes linked with the FGC 'rite of passage' are crucial in shaping a woman's femininity, identity, marriageable status and legitimating sexuality. In turn, these elements are imperative in inculcating and nurturing a positive body-self image and sex appeal and consequently, positive sexual self actu- alization. These finding brings to question the validity of conventional sexuality theory, particularly those that sub- scribe to bio-physical models as universal bases for understanding the subject of female sexual functioning among women with FGC. Socio-cultural-symbolic nexus and constructions of sexuality should also be considered when investigating psychosexual consequences of FGC.

9. Van Decraen E, Michielsen K, Herbots S, Van Rossem R, Temmerman M. Sexual coercion among in-school adolescents in Rwanda : prevalence and correlates of victimization and normative acceptance. AFRICAN JOURNAL OF REPRODUCTIVE HEALTH, 16(3) 139-153.

ABSTRACT
Adolescents are particularly vulnerable to sexual coercion, as victim as well as perpetrator. This paper aims to adapt sexual and reproductive health interventions to the reality of young people's sexuality and relationships. This study assesses the prevalence of forced sex, characteristics of victims and norms regarding sexual coercion among Rwandan adolescents. A survey was completed by 285 senior secondary school students and four focus groups were conducted. Of sexually active respondents, 15.5% (95% CI = [15.1 – 15.9]) reported forced sexual intercourse. Sexual victimization was associated with being female and having (had) a concurrent sexual relationship. Acceptance of sexual coercion was associated with importance attached to Rwandan traditions and an interaction term between sex (being male) and alcohol use. Respondents linked concurrency and age-disparate relationships to transactional sex, increasing the risk of sexual coercion. Various risk factors were identified. The findings suggest the need for moving towards comprehensive sex education.

10. Baan E, Deronde A, Luchters S, Vyankandondera J, Lange J, Pollakis G, Paxton B. HIV Type 1 Mother-to-Child Transmission Facilitated by Distinctive Glycosylation Sites in the gp120 Envelope Glycoprotein. AIDS Research and Human Retroviruses 2012 Jul;28(7):715-24

ABSTRACT
The human immunodeficiency virus type 1 (HIV-1) characteristics associated with mother-to-child transmission (MTCT) are still poorly understood. We studied a cohort of 30 mothers from Rwanda infected with HIV-1 subtype A or C viruses of whom seven infected their children either during gestation or soon after birth. CD4 counts and viral load did not significantly differ between nontransmitting mother (NTM) versus transmitting mother (TM) groups. In contrast to earlier studies we not only analyzed and compared the genotypic characteristics of the V1-V5 region of the gp120 envelope of viruses found in TM and their infected children, but also included data from the NTM. No differences were found with respect to length and number of potential N-glycosylation sites (PNGS) in the V1-V2 and the V1-V5 region. We identified that viruses with a PNGS on positions AA234 and AA339 were preferably transmitted and that viruses with PNGS-N295 showed a disadvantage in transmission. We also showed that the frequency of PNGS-N339 in the viruses of TM and infected children was significantly higher than the frequency in NTM in our cohort and in viruses undergoing sexual transmission while the frequency of PNGS-N295 in children was significantly lower than the frequency in TM and acute horizontal infections. Collectively, our results provide evidence that the presence of the PNGS-N339 site and absence of the PNGS-N295 site in the gp120 envelope confers an advantage to HIV-1 when considering MTCT.

11. Predictors of recurrence of prolapse after procedure for prolapse and haemorrhoids. Festen S, Molthof H, van Geloven A, Luchters S, Gerhards M. Colorectal dis. 2012 Aug;14(8):989-96

AIM The procedure for prolapse and haemorrhoids (PPH) is an effective surgical therapy for symptomatic haemorrhoids. Compared with haemorrhoidectomy, meta-analysis has shown PPH to be less painful, with higher patient satisfaction and a quicker return to work, but at the cost of higher prolapse recurrence rates. This is the first report describing predictors of prolapse recurrence after PPH.

METHOD A cohort of patients with symptomatic haemorrhoids, treated with PPH in our hospital between 2002 and 2009, was retrospectively analysed. Multivariate analysis was performed to identify patient-related and perioperative predictors associated with persisting prolapse and prolapse recurrence.

RESULTS In total, 159 consecutively enrolled patients were analysed. Persistence and recurrence of prolapse was observed in 16% of the patients. Increased surgical experience showed a trend towards lower recurrence rates. Multivariate analysis identified female gender, long duration of PPH surgery and the absence of muscle tissue in the resected specimen as independent predictors of postoperative persistence of prolapse of haemorrhoids. The absence of prior treatment with rubber band ligation (RBL) as well as increased PPH experience at the hospital showed a trend towards a higher rate of prolapse recurrence.

CO NCLUSION In order to reduce recurrence of prolapse, PPH should be performed by a surgeon with adequate PPH experience, patients should be treated with RBL prior to PPH and a resection of mucosa with underlying muscle fibres should be strived for.

3. Other publications

Meng F, Delva W. Applications of network analysis in HIV epidemiology.SACEMA Quarterly 212; March.

Temmerman M, Roelens K. Multiculturele aspecten in de gynaecologie. In: Handboek Gynaecologie, edited by Dhont M. Acco, Leuven/Den Haag 2012, 209-218, ISBN: 978-90-334-8928-0.

4. Presentations and posters

1. Tency I, Verstraelen H, Verhelst R, Temmerman M. (2012). Inflammatory response in maternal serum during preterm labour. In: Wetenschapsdag 2012, Gent, 14 March 2012 (Poster)

Introduction

Preterm birth (PTB) is a delivery before 37 weeks and occurs in 7% of the deliveries in Flanders. PTB is a syndrome initiated by multiple mechanisms (see figure).

Infection and inflammation are the only pathological processes for which a firm causal link with PTB has been established. These processes are chronic and subclinical in nature. Therefore diagnostic markers for subclinical infection and inflammation are needed to identify women at risk for PTB.

Preliminary Results

sTREM-1 concentrations are elevated in maternal serum during spontaneous parturition (either term or preterm). sTREM-1 levels are significantly higher in women with preterm vs. term labour.

2. Bekele BT, Delva W, Ouifki R. Modelling the impact of shifting the current ART initiation threshold on the HIV epidemic. 2nd Treatment as Prevention (TasP) Workshop, Vancouver, Canada, 22-25 April 2012.

3. Verhelst R for the Biomarker Study Group. Characterisation of novel microbicide safety biomarkers in East and South Africa. Europadag, 6 May 2012.

4. Verhelst R for the Biomarker Study Group. Characterisation of novel microbicide safety biomarkers in East and South Africa. LUMIMA, 10 May 2012, Ghent University, Belgium.

5. Wambua S, Verhelst R , Vanden Broeck D, Luchters S, Mandaliya K, Temmerman, M. EDCTP Capacity Building Achievements At The International Centre For Reproductive Health (ICRH) Clinical Research Laboratory In Mombasa, Kenya. LUMIMA, 10 May 2012, Ghent University, Belgium.

6. Tency I, Verstraelen H, Verhelst R , Saerens B, Verhasselt B, Vaneechoutte M, Temmerman M. Elevated sTREM-1 levels in maternal serum during term and preterm labor. EBCOG 2012, which will take place in Tallinn, Estonia, 9 - 12 May 2012

7. Bekele BT, Delva W, Ouifki R. Modelling the impact of shifting the current ART initiation threshold on the HIV and TB epidemics. 3rd SA TB Conference, Durban, South Africa, 12-15 June 2012.

8. Tency I, Verstraelen H, Degomme O, Verhelst R, Saerens B, Verhasselt B, Vaneechoutte M, Temmerman M. sTREM-1 levels are elevated in maternal serum during term and preterm labour JOURNAL OF REPRODUCTIVE IMMUNOLOGY Volume: 94 Issue: 1 Pages: 123-123 DOI: 10.1016/j.jri.2012.03.475 Published: May 2012 ISSN: 0165-0378
Conference: Joint International Congress of the American-Society-for-Reproductive-Immunology (ASRI) and the European-Society-for-Reproductive-Immunology (ESRI) **Location:** Hamburg, GERMANY **Date:** May 30-June 2, 2012 **Sponsor(s):** Amer Soc Reproduct Immunol (ASRI); European Soc Reproduct Immunol (ESRI) **Accession Number:** WOS:000304579400229 - **Document Type:** Meeting Abstract

Also presented at:

9. Tency, I, Verstraelen, H, Degomme, O, Verhelst, R, Saerens, B, Verhasselt, B, Vaneechoutte, M; Temmerman, M. Elevated sTREM-1 levels in maternal serum during term and preterm labor. In: EBCOG 2012, Tallin, Estionia, 9 May 2012

Abstract
OBJECTIVE: The purpose of this study was to assess concentrations of soluble triggering receptor expressed on myeloid cells (sTREM)-1 in maternal serum during term and preterm labor (PTL). MATERIALS AND METHODS: This cross-sectional study included 176 singleton pregnancies in the following groups: (1) preterm birth, delivered before 34 weeks gestation (PTB) (n=52); (2) preterm (PT) not in labor, matched for gestational age (GA) with the PTB group (n=52); (3) women with an episode of PTL who delivered at term (n=10); (4) AT in labor (n=40) and (5) AT not in labor (n=32). Serum concentrations of sTREM-1 were determined by enzyme-linked immunoassay. RESULTS: sTREM-1 was detected in all serum samples. Median sTREM-1 concentrations were significantly higher in women with PTB vs. PT not in labor (367.3 pg/ml, interquartile range (IQR) 303.9-483.1 vs. 272.7 pg/ml, IQR 207.7-334.1; P<0.001) and in women AT in labor vs. AT not in labor (300.0 pg/ml, IQR 239.1-353.0 vs. 227.6 pg/ml, IQR 173.9-284.7; P<0.001). Women with PTB had significantly higher levels of sTREM-1 compared to women AT in labor (367.3 pg/ml, IQR 303.9-483.1 vs. 300.0 pg/ml, IQR 239.1-353.0; P=0.004). No significant differences in sTREM-1 levels were observed between patients with PTB (only those presented with PTL and intact membranes) vs. women with an episode of PTL and at term delivery (367.3 pg/ml, IQR 303.2-436.2 vs. 311.8 pg/ml, IQR 188.7-408.4; P=0.23). CONCLUSION: sTREM-1 is upregulated in serum of women during term and preterm labor, suggesting a role for sTREM-1 in the inflammatory response during labor.

10. Duysburgh E., Zhang W-H., Kerstens B., Temmerman M. International Centre for Reproductive Health: Two MDG 4 & 5 Projects in sub-Saharan Africa. LUMIMA, 10 May 2012, Ghent University, Belgium.

11. Keygnaert I., Anastasiou A., Camilleri K., Degomme O., Devile W., Dias S., Field CA., Kovats A., Vettenburg N. and Temmerman M. Senperforto : determinants for effective prevention and response actions of SGBV perpetration and victimization in the European asylum reception system. 4th Conference on Migrant and Ethnic Minority Health in Europe, 21-23 June 2012, Universita Bocconi, Milan, Italy

12. Maxwell Dalaba, Els Duysburgh, Pencho Tonchev, Germain Savadogo, Happiness Saronga , Hengjin Dong, Rainer Sauerborn and Svetla Loukanova
QUALMAT: oral presentation(by Maxwell Dalaba)
Efficiency of essential maternal health services in selected primary care facilities in Ghana
See: http://eche2012.abstractsubmit.org/presentations/3491/
European conference on Health Economics, 18-21 July, Zurich, Switzerland.

13. Bekele BT, Delva W, Ouifki R. Modelling the impact of shifting the current ART initiation threshold on the HIV and TB epidemics. AIDS 2012, Washington, USA, 22-27 July 2012.

14. Michielsen K, Beauclair R, Delva W, Van Rossem R, Temmerman M. A non-randomized controlled trial to assess the effectiveness of a peer-led HIV prevention intervention in secondary schools in Rwanda: time to rethink the use of peer education in HIV prevention for young people. AIDS 2012, Washington, USA, 22-27 July 2012.

15. Zhang WH, Dewolf M-C, S. Alexander, S. Predictive value of risk questionnaire for prenatal lead exposure: epidemiological studies in two time periods in Belgium. Sino-European Symposium on Environment and Health 2012. 20-25 August, Galway, Ireland. Book of Abstracts

16. Guieu A., Keygnaert I., Temmerman M., Roelens K. " Sexual and Reproductive Health of Migrants in the EU: Does Anybody Care?", INSEP 2012 - Connecting Sexual Ethics and Politics conference, 29-31 August 2012 / Ghent University, Ghent, Belgium

17. Dehaene I, Roets E, Roelens K, Vandenberghe G, Temmerman M. The use of the VOCAL-measured VI for treatment follow-up of scar pregnancies. In: 22nd World congress on Ultrasound in Obstetrics and Gynecology (ISUOG 2012), Copenhagen, Denmark, 9 September, 2012. International Society of Ultrasound in Obstetrics and Gynecology (ISUOG). Poster
Introduction
Scar pregnancy is a rare form of ectopic pregnancy. There is no consensus on the treatment modality. Follow up of efficacy of treatment is therefore imperative. Volume Calculation (**VOCAL)**is a 3D-technique which, in combination with Power Doppler, allows measurement of a vascularity index (VI). The vascularity index illustrates the amount of vessels supplying the pregnancy.
Cases:
Case 1: gestational age of 9 weeks, managed with mifepristone and methotrexate, intramuscular and intra-amniotically. Follow-up: hCG-level + sonography (gestational sac volume and VI).
Case 2: gestational age of 6 weeks, managed with methotrexate, intramuscular and intra-amniotically. Follow-up: hCG-level + sonography (gestational sac volume and VI).
Conclusion:
The VOCAL-measured Vascularity Index is possibly a useful tool in follow-up of scar pregnancy treatment

18. Delva W. Earlier ART initiation for HIV prevention – what difference can it make? BREACH HIV Prevention Summit, Brussels, Belgium, 28-29 September 2012.

19. Verhelst R. Exploration of DGGE for the characterization of the vaginal microbiota. Oral Presentation, Biomarker Workshop, Johannesburg, South Africa, 28 September 2012.

20. Delbaere I, Goossens J, Van Hecke A, Verhaeghe S, De Sutter P, Temmerman M. The preconception consultation at University Hospital Ghent : evaluation of approachability and results of follow-up. In: 2nd European congress on Preconception Care and Health (EPCH 2012), Rotterdam, The Netherlands, 4 October 2012. Erasmus MC. 71.

abstract

Purpose: From January 2010 until April 2011, a preconception consultation was initiated at the ob/gyn department of the Ghent University Hospital with the purpose to assess models for improving preconception care. Within this research we aim to assess which women found their way to our preconception consultation and to explore experiences of our patients. Methods: The approachability of our consultation was analyzed by means of cross-sectional research on relevant data (N=74). One year after the consultation, all patients received a follow-up questionnaire in order to assess satisfaction and outcome. Response rate of this follow-up research was 55%. Results: The majority of women were directly (77%) or indirectly (17%) informed of the existence of our consultation by media coverage. The mean age of women visiting our consultation was 30 years. Almost all women were higher-educated (85%) autochthons (95%). All but one woman returning our follow-up questionnaire were pleased with the services provided. In particular, the provision of thorough and tailored advice was appreciated. The majority of women recommended to provide brochures in order to support the given information. Conclusions: With our preconception consultation at a tertiary health care centre, we reached a relatively older and high-educated population. These women were pleased with the provided services, although they expressed a need for more written information. It is of interest to keep preconception in the media and to increase efforts to reach all women, particularly those who need preconception care most.

21. Leye E, Mergaert L.. Methodology of the study to map FGM in 28 EU States – EIGE Study. 6th FOKO (Nordic Research Network on Female Genital Mutilation) Conference, Oslo, 18-20 October, 2012

22. Mann S., Colbourn T., Barros H., Lopes S., Duysburgh E., for the MOMI consortium. Post-partum mother and child care: a comparison of four African countries. The Lancet Supplement; New Voices in Global Health; 2012:17.

Abstract

Risk of morbidity and mortality during the post-partum period is high for mothers and children in sub- Saharan Africa. It is highest in the first 6 weeks after birth but stays high after 6 weeks because of issues such as untreated anaemia or repeat pregnancy. Improvement of delivery of post-partum care has been neglected as a strategy for improving maternal, infant, and child health. The Missed Opportunities for Maternal and Infant Health project aims to design, implement, and assess interventions for the first post-partum year in Burkina Faso, Kenya, Malawi, and Mozambique. We compared each site to understand how post-partum services could be more effectively organised.

23. Mann S., Nambiar B., Barros H., Lopes S., Duysburgh E. What are the lessons from international comparisons of post partum care provision in Africa ? Results of a comparative policy and situation analysis across four countries. Poster presented at the GLOW Research conference, Liverpool, 23 October 2012.

24. Zhang WH, Duysburgh E, Chenh Y, Temmerman M . Integrating family planning services into existing abortion services in China: needs and challenges. Second Global Symposium on Health System Research. 31 Octobre-3 November 2012. Beijing, China. Book of Abstrcat. http://hsr2012.abstractsubmit.org/book-of-abstracts/

25. Li, JK, Temmerman M , Chen QJ, Xu JL, HU LN, Zhang WH. A review on contraceptive prevalence and changes in married and unmarried women in China during last three decades. Second Global Symposium on Health System Research. 31 Octobre-3 November 2012. Beijing, China. Book of Abstract. http://hsr2012.abstractsubmit.org/book-of-abstracts/

26. Duysburgh E, Zhang WH, Decat P, Kerstens B, De Meyer S, Temmerman M. Stakeholders' inclusion for translating health systems research into policy and action: experiences in Africa, China and Latin America. Second Global Symposium on Health System Research. 31 Octobre-3 November 2012. Beijing, China. Book of Abstract. http://hsr2012.abstractsubmit.org/book-of-abstracts/

27. Botha G, Okello V, Azih C, Welte A, End A, Walsh F, Fleming Y, Delva W. Modelling the minimum required sample size and expected impact of a Treatment as Prevention (TasP) study in Swaziland. Swaziland National Health & Research Conference 2012, Mbabane, Swaziland, 7-9 November 2012.

28. Meng F, Delva W. SIMPACT simulations to support the revision of the WHO ART Guidelines. HIV Modelling Consortium meeting, London, United Kingdom, 12-15 November 2012.

29. Bekele BT, Ouifki R, Delva W. Raising the bar: Projected impact, cost and cost-effectiveness of alternative CD4 cell count thresholds for ART initiation on the HIV and TB epidemic in South Africa. SAMSA 2012, Lilongwe, Malawi, 26-29 November 2012.

30. Leye E, Mergaert L. Striking the right balance between prevention and prosecution of FGM in the EU. Presented at Dynamics of FGM: strategies for prevention worldwide and in Switzerland, Unicef, Berne, Switzerland, 29 November, 2012

Human resources

Conducting a state-of-the art HRM policy is far from easy given the strict regulations imposed by Ghent University and the fact that the vast majority of our staff depends on project funding and therefore can only be given contracts of limited duration. Nevertheless, within these limitations ICRH has taken measures aimed at creating an encouraging and comfortable working environment. These measures include:
-flexible working hours;
-a policy for working from home;
-evaluation and functioning talks for every staff member.

List of employees in 2012

Enrica **Bianco** **	Intern
John-Paul **Bogers**	Visiting Professor
Steven **Callens**	Senior Researcher
Matthew **Chersich**	Visiting Professor
Beatrice **Crahay**	Volunteer Mozambique (and Country Director of ICRH Mozambique)
Carla **De Beule** **	Financial Assistant
Jessika **Deblonde** **	Researcher
Peter **Decat**	Researcher & Team Leader Health Systems
Olivier **Degomme**	Scientific Director
Wim **Delva**	Visiting Professor
Stéphanie **De Maesschalck**	Researcher & Family physician
Sara **De Meyer**	Researcher
Julie **Deman****	Project Collaborator
Cindy **De Muynck** *	Administration and support
Lou **Dierick**	Volunteer Kenya (and Director F&A ICRH Kenya)
Caroline **Duprez****	Administration and support

Els **Duysburgh**	Researcher & Team Leader Maternal Health
Peter **Gichangi***	Visiting Professor
Dominique **Godfroid**	Secretariat Ghent Africa Platform (GAP)
Aurore **Guieu**	Researcher
Laurence **Hendrickx**	Permanent Expert in Mozambique
Li **Jinke****	Postdoc Fellow
Birgit **Kerstens**	MOMI Consortium Project Administrator
Ines **Keygnaert**	Researcher
Olivier **Koole****	Volunteer Mozambique (and Deputy Country Director of ICRH Mozambique
Yves **Lafort**	Researcher & Team Leader HIV/STI
Els **Leye**	Senior Researcher & Team Leader GBV
Joana **Lima** **	Intern
Stanley **Luchters**	Visiting Professor
Kristien **Michielsen**	Researcher
Katherine **Muylaert**	Administrative Project Manager
Gorik **Ooms** *	Hélène De Beir Research Fellow
Chen **Qiju** **	Postdoc Fellow
Marlise **Richter**	PhD Fellow & Researcher
Alexia **Sabbe**	PhD Fellow & Researcher
Dirk **Schelstraete** *	Financial Assistant
Ellen **Taets** **	Administration and support
Marleen **Temmerman** **	Director
Inge **Tency** **	PhD Fellow & Researcher
Dirk **Van Braeckel**	Director Administration & Finance

Davy **Vanden Broeck**	Senior Researcher
An-Sofie **Van Parys**	Phd Fellow & Researcher
Anke **Van Vossole ****	Researcher
Rita **Verhelst**	Senior Researcher
Heleen **Vermandere**	Phd Fellow & Researcher
Bavo **Verpoest**	Project Collaborator
Shuchen **Wang** *	Researcher
Wei-Hong **Zhang**	Senior Researcher

* Joined ICRH in the course of 2012 or in the beginning of 2013. Welcome to the ICRH family!
** Left ICRH in the course of 2011. Thanks a lot for the work you have done with us, and good luck in your career!

ICRH and the environment

The impact of research activities on the environment is rather limited compared to other sectors such as industry or transportation. However, our environmental impacts are far from negligible, and as adherents of sustainable development and the millennium development goals, we hold ourselves responsible for striving to limit our environmental footprint as much as possible. Our main impacts stem from transportation, paper use and energy consumption. In each of these fields, we have taken measures to avoid excessive consumption of resources or emissions.

Transportation

For reducing the impacts of commuting of ICRH employees, we benefit from the general stimulation measures of Ghent University:
-Public transport commuting expenses are fully reimbursed,
-Commuting by car is discouraged and related costs are not reimbursed,
-Employees can rent a bicycle from the university at favourable conditions, and employees commuting by bicycle receive a financial compensation.

Waste production

ICRH produces almost exclusively office waste, such as paper and ink cartridges. Wasted is sorted and the fractions are separately removed by the maintenance staff.
ICRH is monitoring its paper consumption for copying and printing. The evolution is as follows:

Compared to 2011, the number of photocopies and prints has increased further increased. This can partly be explained by the slightly increased number of staff and the increased project volume, but this evolution urges us to renew our efforts to stimulate staff members and visitors to comply with printing and copying guidelines, and to encourage the use of scans for archiving documents as opposed to hard copies.

	Oct. 2008-Sept 2009*	Oct. 2009-Sept. 2010	Oct. 2010-Sept 2011	Oct 2011-Sept 2012
Black and white prints and copies	185989	140,495	139,992	145,337
Colour prints and copies	-	25,543	36,027	44,162
Total	185989	166,038	176,019	189,499
Difference compared to the previous year		-10.3%	+6.0%	+7,7%

**Extrapolated from partial data*

Energy consumption

The non-transportation related energy consumption of ICRH is mostly limited to office heating and lighting. There is no separate tracking of energy consumption for the ICRH offices. In the summer of 2012, ICRH moved to new offices which were thoroughly renovated before our arrival. 2012. Energy

performance is probably somewhat better than in the previous building, but unfortunately, this some major opportunities for increasing energy-efficiency, such as better isolation, installation of photovoltaic cells on the roof and smart lighting were not grasped. We try to bring down our energy consumption by 'good housekeeping measures', such as switching off the lights and turning down the heating whenever possible.

The Ghent University Sustainability Pact

In the course of 2011, Ghent University students, together with the university's environmental and communication departments, launched a university-wide initiative to reduce the environmental burden. Departments, laboratories and offices are requested to sign a sustainability pact, in which they commit to a number of very diverse environmental measures, ranging from energy saving actions like switching off lights, heating and computers, over applying environmental criteria to purchases, to encouraging environmentally friendly communing. ICRH was the first department within the Faculty of Medicine and Health Sciences to sign the Pact.

View from the new ICRH Belgium offices

ICRH Group

The International Centre for Reproductive Health in Belgium works closely together with its sister organizations ICRH Kenya, based in Mombasa and Nairobi, and ICRH Mozambique, based in Maputo and Tete. In order to formalize the close ties between these organizations, and to facilitate coordination, an umbrella organization has been set up in 2009 under the name of ICRH Global. Below we give a brief outline of ICRH Global, ICRH Kenya and ICRH Mozambique.

ICRH Global

The Board of Directors of this not-for-profit organization consists of representatives from ICRH Belgium, ICRH Kenya, ICRH Mozambique, and the Ghent University, and vice versa, ICRH Global will appoint representatives in the management structures of the individual ICRHs.
In addition to its coordination tasks, ICRH Global will organize networking and information activities in the field of sexual and reproductive health and rights.
Organizations as well as individuals can become member of ICRH Global.
In the course of 2011, ICRH Global focused started up a project on maternity waiting homes in Kenya and Mozambique, funded by the National Lottery Fund and by the Collibri Foundation for Education (see 3.3 Activities of the Maternal Health team) and co-organized a series of lectures on 'Reproductive Health in Global Perspective' (see 3.6 Non team-related activities). In addition, regular dialogue and consultation among the three ICRHs took place.
Contact: ICRH Global, Ghent University Hospital, De Pintelaan 185, P3, 9000 Ghent, Belgium, dirk.vanbraeckel@ugent.be

ICRH Kenya

In the year 2012 a number of studies reached their conclusion at ICRH Kenya. In April 2012 the clinical part of the Biomarkers study came to an end after seeing the last study participant. Data cleaning is ongoing and most of the queries have been resolved awaiting for the database lock.
Similarly the Alcohol study also came to an end in October 2012. This was a two arm longitudinal comparative research/intervention study among female sex workers. A total of 818 FSWs with harmful or hazardous alcohol use were enrolled into the study after more than 6 months of competitive screening, recruitment, and enrolment with a follow-up period of 12 months. Data entry complete, data cleaning on going.
ICRHK continued to support the MARPS interventions in Coast Province through the UNFPA funded Alternative Means of Livelihood and AphiaPlus programmes.
The MOMI project, started in the year 2011 with the collection of baseline data looking at community and facility capacity for service provision, current key maternal and child health indicators plus analysis of maternal, new-born and child health policies on postpartum care. The highlight of activities for the project was the formation of the policy advisory board (PAB) whose primary function is to bridge the gap between research and policy.

The Gender Based Violence Recovery Centre (GBVRC) based at the Coast Province General Hospital (CPGH) marked its fifth anniversary. During 2012, a total of 611 survivors were seen. From the inauguration of the centre (May 2007 to Dec 2012) a total of 3,275 survivors have been attended to. 'Haki Yenu'(It is your right). started in October 2011, is an ongoing study that is making a follow up on the survivors attended to at the SGBV Recovery Clinic to establish how many cases made it through the criminal justice system. The main goal of the study is to improve access to justice for survivors of sexual violence. Through the Haki Yenu a total of 24 communities based paralegals have been trained on GBV Prevention and response. A mapping exercise of GBV service providers was also conducted. The paralegals are an important avenue for linking the community to services being provided at the GBVRC hence strengthening referrals and access to services, including access to justice.
The new organization structure was implemented at the beginning of the year. In August 2012 , ICRHK got a Research and Science Director to help steer the growth of research in the organization while working hand in hand with the other directors to bring on board new projects for ICRHK in year 2013.

The ICRH Kenya Team in December 2012 with UGent Medical Students

ICRH Mozambique

In 2012 ICRH-M started the implementation of new projects with research components such as:

- Evaluation of efficacy and feasibility of Option B+ for PMTCT in Tete and Moatize towns and impact of «madrinhas and padrinhos» on the use and access of mother and child health services in Changara district, all in Tete Province;

- Situation analysis of the sexual and reproductive health services for women, including sex workers, in Moatize and Tete towns, in order to develop interventions to improve their health;
- Finalization of the situation analysis of the post partum care and services available in Chiuta district, Tete Province and development of the general package of interventions necessary to overcome Missed Opportunities in Maternal and Child Health (MOMI);
- Research to understand the determinants of the access and use of maternity waiting homes in the Southern and Central regions of the country.
- Development of the intervention of the WHO project aiming at improving antenatal consultations in all the three regions of the country;
- Development of a project to understand and overcome the determinants of access and use of family planning services in Marracuene and Manhiça districts, Maputo Province.

A Memorandum of Understanding was signed between ICRH-M and the Ministry of Health, this formalizes the recognition of ICRH-M as partner of the Ministry of Health.
ICRH-M continued to improve its administrative and financial management and procedures, to ensure better accountability to its donors and members of its General Assembly. It also held its the first annual retreat for all ICRH-M staff, Maputo and Tete, to ensure common understanding of ICRH-M structures, policies and procedures and to prepare the 2013 annual work plan of the institution.

ICRH Mozambique Team Retreat, October 18-19, Songo, Tete province

List of abbreviations

AIDS	Acquired Immune Deficiency Syndrome
AIGHD	Amsterdam Institute for Global Health and Development
AMC	Academisch Medisch Centrum (University of Amsterdam)
ANC	Antenatal Care
AOR	Adjusted Odds Ratio
ARL	AIDS Reference Laboratory
ART	AntiRetroviral Therapy
AWEPA	The Association of European Parliamentarians for Africa
AZ	Algemeen Ziekehuis (general hospital)
BIDENS	Belgium, Iceland, Norway, Denmark, Estonia and Sweden
BREACH	Belgian AIDS and HIV Research Consortium
BV	Bacterial Vaginosis
CD4	Cluster of Differentiation 4
CERCA	Community Embedded Reproductive Health Care for Adolescents
DIFFER	Diagonal Interventions t Fast Forward Enhanced Reproductive Health
DNA	Desoxyribo Nucleic Acid
DRC	Democratic Republic Congo
EDCTP	European and Developing Countries Clinical Trials Partnership
ELISA	Enzyme Linked Immuno-Sorbent Assay
EMA	European Medicines Agency
EU	European Union
FGM	Female Genital Mutilation
FOHCUS	Focal Point on Harmful Cultural Practices
FSW	Female Sex Workers
FWO	Fonds Wetenschappelijk Onderzoek (Research Foundation Flanders)
GBV	Gender-based violence
HAART	Highly Active Antiretroviral Therapy
HIV	Human Immunodeficiency Virus
HPV	Human Papilloma Virus
ICPD	International Conference on Population and Development
ICRH	International Centre of Reproductive Health
IQR	Inter-Quartile Range
ITM	Institute of Tropical Medicine
IUC	Institutional University Cooperation
IWT	Institute for Innovation through Science and Technology
KAP	Knowledge – Attitude - Practice
LSHTM	London School of Hygiene & Tropical Medicine
MARP	Most-At-Risk Populations

MDG	Millennium Development Goals
MITU	Mwanza Intervention Trials Unit
MSM	Men having Sex with Men
MTCT	Mother-To-Child Transmission
NGO	Non-governmental organization
NIMR	National Institute for Medical Research
NRF	National Research Foundation
NTNU	Norwegian University of Science and Technology Faculty of Medicine
PCR	Polymerase Chain Reaction
PMTCT	Prevention of Mother to Child Transmission
QUALMAT	Quality of Maternal and Prenatal Care: Bridging the Know-Do Gap
RCT	Randomized Controlled Trial
RHEA	Centrum voor Gender en Diversiteit
RHRU	Reproductive Health and HIV Research Unit
RNA	Ribonucleic acid
RTI	Reproductive Tract Infections
SACEMA	South African Centre for Epidemiological Modelling and Analysis
SD	Standard deviation
SGBV	Sexual and Gender Based Violence
SRHR	Sexual and Reproductive Health and Rights
STD	Sexually transmitted disease
STI	Sexually Transmitted Infections
TB	Tuberculosis
UEM	University Eduardo Mondlane
UNFPA	United Nations Populations Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
UZA	Universitair Ziekenhuis Antwerpen (University Hospital Antwerp)
VLIR	Vlaamse Interuniversitaire Raad (Flemish Interuniversity Council)
VLIR-UOS	Vlaamse Interuniversitaire Raad - University Development Cooperation
VUB	Vrije Universiteit Brussel
WHI	Women's Health Initiative
WHO	World Health Organisation
WRHI	Wits Reproductive health and HIV Institute
ZNA	Ziekenhuis Netwerk Antwerpen (Antwerp Network of hospitals)

Contact

ICRH Belgium:, Ghent University, De Pintelaan 185 – UZP114, 9000 Ghent – Belgium, tel. +32 9 240 35 64, fax +32 9 240 38 67, e-mail icrh@ugent.be

Website www.icrh.org

Donations

By supporting our projects and interventions, you are contributing to a better world for many women, vulnerable people and children.

You can donate to:

ICRH Belgium: Bank account Ghent University: 390-0965803-29 - IBAN: BE26 3900 9658 0329 (BIC: BBRUBEBB)
Bank address: ING Belgium - Business Centre Gent - Kouter 173 - 9000 Gent
SWIFTCODE: BBRU BE BB 900
IBAN: BE59-3900-9658-0026
Please use reference ' FWUGent/GE/43'

Ghent University is a tax exempt charitable corporation. Donations are deductible from your federally-taxable income.

If you don't need a tax certificate, you can also donate to **ICRH Global**, the umbrella organisation of all ICRHs, on bank account 290-0205979-69
Bank address: BNP Paribas Fortis - Zwijnaardsesteenweg 674 - 9000 Gent
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