

ICRH
International Centre
for Reproductive
Health
WHO Collaborating Centre



www.icrh.org



annual report

2010

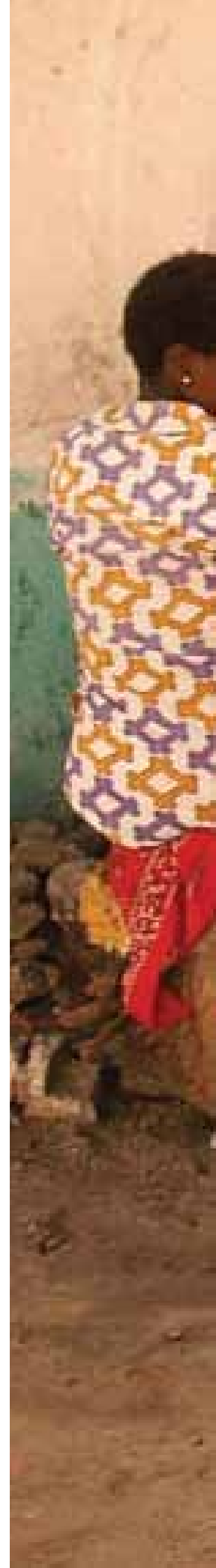




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1. Word from prof. Marleen Temmerman

Greetings and best regards from ICRH 2010! In this report, we are pleased to tell you about our activities, publications and other achievements. I hope you will enjoy this concise summary of a wide range of ICRH projects from across the globe.

Looking back and reflecting at what we have been able to accomplish at ICRH, I feel proud, hopeful but also concerned. Happy because of the progress we made despite the many difficulties we faced inside and outside the organization, hopeful to look forward to continuing cutting-edge, ongoing work and launching new projects in the area of reproductive health and rights, and concerned because of the climate of growing opposition to sexual and reproductive health and rights in many parts of the world and in the international community. The opposition to sexual and reproductive rights and health seems to get stronger, more organized and aims to obstruct policies and programs related to gender, sexuality, sexual and reproductive health, reproductive rights, comprehensive sexuality education, young people's and adolescents' sexual and reproductive health and rights, harmful traditional practices such as female genital mutilation/ cutting, and gender equality.

The year 2010 was quite difficult for ICRH because of financial limitations resulting in more challenges to acquire projects and funding, because of some very good people who left us in the course of the year and because of the re-organization process that always takes more time than anticipated. Nevertheless, in 2010 we finalized our new management structure with the recruitment of Olivier Degomme as new scientific director, in replacement of Stanley Luchters who left ICRH as a staff member but was appointed visiting professor at ICRH in October 2010, together with John-Paul Bogers.

We also created a fifth thematic team, focusing on research into HPV and cervical cancer.

I also thank the staff members who have left ICRH in the course of 2010 for their contribution to our work and our organization. Among them Marleen Bosmans who left the organization after more than 10 years for personal reasons and is difficult to replace because of her specific role in representing ICRH and advocating sexual and reproductive health and rights at all kinds of national and international platforms. Thanks to Marleen and others who left us, and welcome to the new staff whose names and functions are listed in the Human Resources section of this report.

It is always a pity to see valuable collaborators leave, even if we were so lucky to see the total number of staff increase to 33 in the course of 2010.

I am very happy to see the ICRH family grow in different countries and network with more organizations all over the globe. In that way we are better equipped to accomplish our mission by conducting medical and social science research, bridging the gaps between research and policies, investing in education and advocacy, and promoting policies and practices for better sexual and reproductive health and rights.

As we move towards the 20th anniversaries of the International Conference on Population and Development in Cairo (1994) and the World Conference on Women in Beijing (1995), ICRH will be focusing on working with many allies and friends to uphold the Cairo Program of Action and the Beijing Platform for Action agreements, to advance the sexual and reproductive rights and health agenda forward, and to achieve the health and gender related Millennium Development Goals.



Prof. Dr. Marleen Temmerman
Director ICRH



Photo credit: www.freedigitalphotos.net



2. The International Centre for Reproductive Health

The International Centre for Reproductive Health (ICRH) was established in 1994 in response to the International Conference on Population and Development (ICPD, Cairo, 1994) as a multidisciplinary centre of excellence aiming at contributing to sexual and reproductive health and at promoting it as a human right.

ICRH conducts research and interventions 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.





3 **Activities 2010**

3. Activities 2010

As explained above, the activities of ICRH are structured into five thematic clusters. Each of these clusters is dealt with by a distinct team:

- The HIV/STI team
- The Gender Based Violence team
- The Maternal Health team
- The Health Systems team
- The HPV/Cervical Cancer team (was split of from the HIV/STI team in 2010)

3.1. 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), and consists of 7 members. The objectives of the team are to coordinate all ICRH-Belgium HIV/STI activities, exchange information, develop joint initiatives and build capacity. 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, HIV and infertility, prevention of mother-to-child transmission (PMTCT), HIV counselling and testing in Europe, vaginal microbicides trials and the role of mycoplasmas and bacterial vaginosis. The team is led by Yves Lafort.

3.1.1 PROJECTS

3.1.1.1 Integrated network combating HIV/AIDS in Tete, Mozambique, phasell (Rede Integrada phase II)



Financed by: Flemish International Cooperation Agency
Coordinator: ICRH Belgium
Partners:
Mozambique: Provincial Health Directorate of Tete
Belgium: ICRH-Belgium
 The Institute of Tropical Medicine Antwerp
 Artsen zonder Grenzen/Medecins sans Frontieres
Budget: 1,356,600 EUR
Start Date: 1 July 2007
End Date: 30 September 2010
Contact Person at ICRH: Yves Lafort
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ICRH is a partner in the 'integrated network' (rede integrada) project that aims to strengthen the capacity of the Tete Provincial and District Health Departments of Mozambique in providing quality HIV/AIDS/STI services. ICRH takes responsibility for strengthening the areas of PMTCT, STI care and capacity building. Activities include training and supervision of health staff, development of appropriate systems and tools, and careful monitoring, evaluation and documentation of services. A night clinic providing reproductive health services for most-at-risk populations is supported. Operational research is conducted mainly focusing on assessing factors that determine access to quality HIV/AIDS/STI services. In 2007 the second 3-years phase was initiated. In 2010, the project was successfully concluded. Two quality of care assessments, one of PMTCT services and one of STI care services, were conducted, showing a substantial improvement in coverage and quality of these services over the last three years. The assessment of the effect of a better integration of the MCH services on an improved follow-up of children born to HIV positive mothers was concluded. Factors, such as the availability of personnel and supplies were found to be more important determinants of loss to follow-up. The study assessing the role of HIV and syphilis infections in stillbirths is still ongoing. The night clinic was further supported, and the results of the performance assessment conducted in 2008 were published in BMC Health Serv. Res. Sexual and reproductive health services for most-at-risk populations will be further expanded and improved in a next project, partly financed by the Flemish International Cooperation Agency, and partly by a public-private partnership between USAID and the Brazilian mining consortium 'Projeto Carvão Moatize'.

3.1.1.2 Characterisation of Novel Microbicide Safety Biomarkers in East and South Africa (BIOMARKERS)

Financed by: EDCTP
Coordinator: ICRH Kenya
Partners:
Kenya: ICRH-Kenya
Belgium: ICRH
Ghent University
ITM (Prince Leopold Institute for Tropical
Medicine)
South Africa: WHI (formerly RHRU)
Rwanda: Project Ubuzima
Tanzania: MITU/NIMR
Netherlands: AMC-CPCD
United Kingdom: LSHTM
MRC-CTU
Budget: 2,688,595 EUR
Start Date: 5 April 2009
End Date: 4 April 2012
Contact Person at ICRH: Rita Verhelst
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Vaginal microbicides are being developed to expand HIV prevention options for women and couples. A healthy vaginal environment protects women from infections and should therefore remain intact during and after product administration. Until recently, microbicide safety trials included naked-eye pelvic exams and colposcopy to visualize genital epithelial disruption and inflammation, and vaginal fluid microscopy to evaluate the vaginal flora. However, recent experiences with the candidate microbicide cellulose sulfate gel suggest that vaginal flora is insufficient to predict potential harm. The purpose of this study is to establish baseline ranges of biomarkers related to the vaginal environment in 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 will be 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 BV, HIV-negative adult women using traditional vaginal practices, HIV-negative adult pregnant women, HIV-negative adolescents, healthy HIV-positive adult women. The expected outcome is the identification of biomarkers that could be introduced in the next generation microbicide safety trials.

In 2010, the study protocol was designed, ethical approval was obtained in all sites and Standard Operating Procedures were agreed upon. All sites were trained in diagnostic testing and quality assurance of diagnostic testing, and technology transfer for cutting-edge laboratory techniques was performed. Screening of volunteers was initiated in one site and the study initiation of all other sites has been prepared.



Photo credit: Liselotte Hardy

3.1.1.3 Assessment by Molecular Methods of Safety and Colonization Potential from well Characterized Probiotic Strains in South African Women with Healthy and Disturbed Vaginal Microflora (PROBIOGENOMICS)



Photo credit: www.freedigitalphotos.net

Financed by: NRF-FWO
Coordinator: ICRH Belgium
Partners:
Belgium: ICRH Belgium
South Africa: WRHI (formerly RHRU)
Budget: 420,000 EUR
Start Date: 1 October 2010
End Date: 30 September 2013
Contact Person at ICRH: Rita Verhelst
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Alterations in the vaginal microbiome contribute to the risk of preterm birth, increased transmission of sexually transmitted agents and increased mother-to-child-transmission of HIV. Exogenous supplementation of vaginal bacteria to maintain and restore a healthy vaginal microflora could lead to important intervention strategies.

Using a combination of classical biochemical and molecular methods at WRHI (Wits Reproductive Health and HIV Institute, formerly RHRU) and high throughput genome sequencing technologies (probiogenomics) available at UGhent (NXTGNT platform), this project will provide fundamental knowledge on how probiotic bacteria sense and adapt to the vaginal microflora and influence vaginal ecology. Also, molecular based methods (real time PCR) for quantification of vaginal bacteria will be implemented at WRHI. This technology will allow our South-African partner to assess the safety of vaginal microbicides in future studies.

In 2010, this project started with a joint meeting at WRHI. During this meeting the project timeline and responsibilities of each partner were set and a technology transfer on anaerobic culture of vaginal bacteria and assessment of hydrogen peroxide production has been performed.

3.1.1.4 HIV testing and counselling in Europe: from policies to effectiveness

In the European Union (EU) and neighbouring countries, an estimated 30% of people living with HIV are unaware of their positive serostatus. Therefore they do not benefit from timely treatment and may transmit HIV unknowingly. Opportunities to diagnose HIV are being missed, particularly in regular health care settings, resulting in increased incidence of AIDS defining illnesses, non-AIDS related events and potentially death. While it is recognised that most EU countries have national policies and/or professional guidelines on antenatal HIV screening, systematic information on national HIV testing policies in other settings and population groups is lacking. Moreover, it has not been systematically assessed if and how HIV testing policies are being implemented and there is a lack of structured information on barriers to HIV testing and counselling in Europe.

The overall aim of the study is to contribute to improvement of access, uptake and effectiveness of HIV testing and counselling to populations at increased risk for, and vulnerable to HIV in EU countries. Specific objectives are 1) to map HIV testing policies and guidelines; 2) to identify practices and barriers with regard to HIV testing and counselling; 3) to develop a framework to improve the effectiveness of HIV testing and counselling.

In 2010, national HIV testing policies in Europe were reviewed to explore the characteristics and variations across European countries. Study results were disseminated. In addition, a research consortium has been set up at the Ghent University with the aim to elaborate an integrated model for improving STI/HIV prevention and uptake of testing among men having sex with men (MSM).



Coordinator: ICRH Belgium
Start Date: 1 October 2010
End Date: 30 September 2013
Contact Person at ICRH: Jessika Deblonde
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3.1.1.5 The Added Value of a Theory Driven Design for HIV Risk Reduction Programs: A Case Study in Secondary Schools in Rwanda

Financed by:	Research Foundation Flanders (FWO), Belgium National Lottery Fund, Belgium
Coordinator:	ICRH Belgium
Partners:	
Belgium:	Belgium Red Cross Flanders
Rwanda:	Rwandan Red Cross
Budget:	155,600 EUR
Start Date:	October 2007
End Date:	September 2011
Contact Person at ICRH:	Kristien Michielsens Kristien.Michielsent@UGent.be



In sub-Saharan Africa, notwithstanding all efforts to prevent HIV infection among youth, an estimated 4.3% of women aged 15 to 24 years and 1.5% of young men are infected with HIV. Interventions aiming to reduce sexual risk behaviour of youth show little to no effect. The overall aim of the study is to improve the effectiveness of sexual and reproductive health interventions for young people.

The study assesses the effectiveness of a HIV Peer Education programme implemented by the Red Cross in Rwanda. After a baseline study among 2000 secondary school students in March 2009, two follow-up surveys were done in March and September 2010. The surveys assessed their knowledge, attitudes and behaviour concerning HIV/AIDS. Furthermore, two smaller qualitative studies were undertaken studying relationships among young Rwandans and sexual violence.

3.1.1.6 SIMPACT: An Individual-based Model for HIV Epidemics in Complex Sexual Networks

Financed by:	Research Foundation Flanders (FWO), Belgium Institute for Innovation through Science and Technology (IWT), Belgium
Coordinator:	ICRH Belgium
Partners:	
Netherlands:	Hummeling Engineering
South Africa:	SACEMA (South Africa)
Budget:	20,000 EUR
Start Date:	10 October 2008
End Date:	30 September 2010
Contact Person at ICRH:	Wim Delva Wim.Delva@UGent.be



While for a long time, classic epidemiological models have established the role of heterogeneity in sexual behavioural and HIV infectiousness in the epidemiological dynamics of HIV epidemics, there is an important need for new models able to capture the effects of concurrent relationships on the spread of HIV in the population. In 2010, ICRH-Belgium continued its collaboration with SACEMA (South African Centre for Epidemiological Modelling and Analysis) and Hummeling Engineering, and produced a first Beta version of SIMPACT, a novel individual-based model to simulate HIV epidemics emerging in complex sexual networks that may feature concurrency and age disparate relationships. SIMPACT was successfully used to simulate the likely impact of HIV prevention programmes based on reducing the prevalence of concurrent relationships in Swaziland and Botswana.

3.1.1.7 Age Disparate Relationships and Condom Use Among Young People in South Africa



Photo credit: www.freedigitalphotos.net

Financed by: Institute for Innovation through Science and Technology (IWT), Belgium
European Society of Contraception and Reproductive Health (ESC)

Coordinator: ICRH Belgium

Partners:

South Africa: SACEMA

United Kingdom: University of Southampton

Budget: 12,000 EUR

Start Date: 1 July 2009

End Date: 31 August 2010

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Age differences between sexual partners are typically larger in sub-Saharan Africa than in other parts of the world. It is still unclear however, to what extent age disparate relationships contribute to the rapid and generalized spread of HIV in many countries in sub-Saharan Africa. In 2010, ICRH-Belgium, in collaboration with SACEMA, embarked on a secondary data analysis of the Cape Area Panel Survey, to explore the average age differences and the behavioural and demographical risk factors associated with larger age differences in sexual relationships reported by young women from the greater Cape Town area. While women were on average 4 years younger than their partners, individual age differences ranged from women being 4 years older to 28 years younger. About one in three women was in an age-disparate relationships (being 5 or more years younger than their partner). Not having used a condom at last sex, being black and receiving money or other material gifts were factors independently associated with larger age differences.

3.1.1.8 HIV Prevention Through Sport: The Case of the Mathare Youth Sport Association in Kenya



Photo credit: Mathare Youth Sports Association

Financed by: Research Foundation Flanders (FWO), Belgium
Institute for Innovation through Science and Technology (IWT), Belgium

Coordinator: ICRH Belgium

Partners:

Kenya: Mathare Youth Sports Association

Belgium: K.U. Leuven

Budget: 2,000 EUR

Start Date: 1 October 2008

End Date: 30 September 2010

Contact Person at ICRH: Wim Delva
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Sport has become a popular tool for HIV prevention, based on claims that it can foster life skills that are necessary to translate knowledge, attitudes and behavioural intentions into actual behaviour. Empirical evidence of the effectiveness of sport-based HIV prevention programmes is, however, sorely lacking. In 2010, ICRH-Belgium published the key findings of the cross-sectional survey which assessed sexual behaviour and the determinants thereof among 454 youth of the Mathare Youth Sport Association (MYSA) in Kenya and a control group of 318 non-MYSA members. MYSA members were more likely to use condoms during the first sex act. Consistent condom use with the current/last partner was 23.2% (36/155) among MYSA members versus 17.2% (17/99) among the control group. Even after adjusting for media exposure – a factor associated with both MYSA membership and higher frequency of condom use – MYSA members were still found to use condoms more frequently with their current/last partner. Nevertheless, levels of condom use remain disturbingly low. The publication's concluding remarks were that more rigorous evaluations of sport programmes for HIV prevention are needed, and that, when possible, programmes should be preceded by baseline assessments, trends in risk behaviour of the intervention group should be compared with those of a control group, and protocols for data collection and analysis should include measuring of and adjusting for potentially confounding factors.

3.1.1.9 Serial Monogamy and the Spread of HIV: How Explosive can it get?

<p>Financed by: Research Foundation Flanders (FWO), Belgium Institute for Innovation through Science and Technology (IWT), Belgium</p> <p>Coordinator: ICRH Belgium</p> <p>Partners:</p> <p>South Africa: SACEMA</p> <p>Budget: -</p> <p>Start Date: 1 October 2008</p> <p>End Date: 30 September 2010</p> <p>Contact Person at ICRH: Wim Delva Wim.Delva@UGent.be</p>
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Photo credit: www.freedigitalphotos.net

The debate on the historic role of concurrent versus serially monogamous relationships in the spread of HIV in southern Africa is still ongoing. To elucidate the likelihood of rapidly growing HIV epidemics in serially monogamous networks, ICRH-Belgium collaborated with SACEMA to develop a mathematical model for HIV transmission during the early phase of the South African HIV epidemic.

The model suggested that the doubling time in South Africa would have been 2.9 years in 1990 and that the basic reproductive number would be 5.1 if HIV was only transmitted via serially monogamous relationships. Less than 5% (189/4000) of model simulations generated doubling times between 0.7 and 1.2 years, as observed in South Africa. The modelled doubling time was most sensitive to assumptions about the effect of STI co-infection, the frequency of unprotected sex acts and the transmission probability per sex act during chronic HIV infection. The results of this modelling study were presented at the 18th International HIV/AIDS Conference, Vienna, Austria, 18-23 July 2010.

3.1.1.10 Sex Work During the 2010 FIFA World Cup: A Three-Wave Cross-sectional Survey

<p>Financed by: United Nations Populations Fund (UNFPA)</p> <p>Coordinator: SWEAT-South Africa</p> <p>Partners:</p> <p>South Africa: SACEMA Wits University</p> <p>Budget: 10,000 EUR</p> <p>Start Date: 1 April 2010</p> <p>End Date: 31 December 2010</p> <p>Contact Person at ICRH: Wim Delva Wim.Delva@UGent.be</p>



Photo credit: www.freedigitalphotos.net

In the months leading up to the 2010 FIFA World Cup in South Africa, the international media postulated that at least 40 000 foreign sex workers would enter South Africa, and that an increased HIV incidence would follow. To strengthen the evidence base of future HIV prevention and sexual health programmes during international sporting events, ICRH-Belgium, Wits University and SACEMA jointly monitored the supply and demand of female sex work in the weeks before, during and after the 2010 FIFA World Cup.

Three telephonic surveys were conducted among female sex workers advertising online and in local newspapers, in the last week of May, June and July 2010. The client turnover rate did not change significantly during or after the World Cup. The fraction of non-South African sex workers declined during and after the World Cup. Relatively more clients were foreign during the World Cup among sex workers advertising in the newspapers but not among those advertising online. Self-reported condom use was high (99.0%) at baseline, and did not change during or after the World Cup. These findings do not provide evidence for mass-immigration of foreign sex workers, nor a spike in sex work or risk of HIV transmission during the World Cup. A media conference was organized in Cape Town, South Africa, in October 2010 to share the key findings of the survey.

3.1.1.11 Earlier Antiretroviral Treatment Initiation for HIV prevention in South Africa



Photo credit: www.freeidgphoto.com

Financed by: Merck, Inc.
Coordinator: SACEMA – South Africa
Partners:
South Africa: Wits University
Belgium: ICRH Belgium
Budget: 16,000 EUR
Start Date: 1 April 2010
End Date: 31 December 2010
Contact Person at ICRH: Wim Delva
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Universal, immediate Treatment-centred Prevention (TcP) of the human immunodeficiency virus (HIV) has great potential to reduce the burden of HIV and Mycobacterium tuberculosis (TB) in sub-Saharan Africa, but may not be feasible nor affordable. Prioritizing 20-30 year old adults and shifting rather than eliminating the CD4 cell count ART initiation criterion may be more efficient and affordable.

ICRH-Belgium and SACEMA developed a mathematical model for the transmission and treatment of HIV in South Africa to estimate the impact, efficiency and incremental HIV treatment investments of universal, immediate ART initiation and alternative TcP strategies. The estimated impact of TcP in South Africa ranged from averting 480,000 to 1,840,000 HIV infections, 210,000 to 940,000 HIV-related deaths and 100,000 to 640,000 TB infections, and saving 670,000 to 3,140,000 life years between 2011 and 2021 for respectively age-prioritized TcP with ART eligibility from 350 CD4 cells/L and universal, immediate ART eligibility. Over the next 10 years, the respective strategies would require 2,970,000 and 29,410,000 additional person-years of ART. This modelling study concluded that while age-prioritizing and more conservative CD4 count initiation criteria would reduce the potential impact of TcP, they would also boost its efficiency and affordability, both of which are fundamental criteria for implementation of TcP beyond clinical trial settings. The results of this study were presented at the 3rd annual ISPOR SA Congress, September 2010, Johannesburg, South Africa.

3.1.1.12 Age-disparity, Sexual Connectedness and HIV Infection in Disadvantaged Communities around Cape Town, South Africa



Photo credit: www.freeidgphoto.com

Financed by: Research Foundation Flanders (FWO), Belgium
 VLIR, Belgium
Coordinator: ICRH Belgium
Partners:
South Africa: SECEMA
Belgium: Hasselt University
Budget: 500,000 EUR
Start Date: 1 January 2010
End Date: 31 December 2014
Contact Person at ICRH: Wim Delva
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In 2010, ICRH-Belgium, in collaboration with SACEMA embarked on a 5-year project to investigate 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.

A first challenge in addressing this knowledge gap is Social Desirability bias when surveying sexual behaviour and relationship histories. To this end, we developed a study protocol for a sexual network survey with a focus on timing and age disparity of relationships, condom use and the use of drugs and alcohol at the time of the first sexual intercourse with each new partner.

The physical administration of the questionnaire combines the use of a safe and confidential mobile interview space, audio computer-assisted self-interview technology with orientation material and warm up questions, a choice of languages including appropriate use of local slang and visual feedback of temporal information. The survey will be administered in three per-urban disadvantaged communities in the greater Cape Town area with a high burden of HIV, which have previously participated in a TB/HIV study, from which HIV test results will be anonymously linked to analysis data sets. Representatives of the study populations responded supportively to the proposed study design in cognitive interviews which also formed the basis of questionnaire refinement. Statistical analysis of the data will comprise mainly descriptive demographic, epidemiological, and sociological analyses, linear mixed-effects models for the inter- and intra-subject variability in the age difference between sexual partners, recurrent events analysis for concurrency patterns, and logistic regression for association of HIV status with age disparity and sexual connectedness.

3.1.1.13 Evaluation of Risk Factors for Infertility and its Association with HIV/STIs in Rwanda: A Case Control Study

<p>Financed by: European and Development Countries Clinical Trials Partnership (EDCTP) Flemish Interuniversity Council (VLIR-UOS)</p> <p>Coordinator: ICRH-Belgium and Projet Ubuzima-Kigali</p> <p>Partners: Rwanda: CHUK (Centre Hospitalier Universitaire de Kigali)</p> <p>Budget: 134,467 EUR</p> <p>Start Date: 1 November 2006</p> <p>End Date: 31 October 2010</p> <p>Contact Person at ICRH: Nathalie Dhont Nathalie.Dhont @UGent.be</p>	
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Photo credit: www.freedigitalphotos.net

Infertility is a neglected public health problem in sub-Saharan Africa (SSA), affecting 10-20% of couples. The consequences of infertility are often more severe in traditional societies where motherhood is of utmost importance for the woman's status than in western societies. Most of the infertility in this region is caused by –preventable– infection related pathology resulting in fallopian tube damage and sperm abnormalities. In order to formulate cost-effective health interventions aimed at preventing infertility it is necessary to identify modifiable risk factors for infertility in SSA.

The relationship between HIV and infertility deserves special attention. It is known from few previous studies that the HIV prevalence is up to threefold higher in infertile couples compared to fertile couples. Couples in infertile relationships may constitute an important vulnerable group for HIV infection in African society and may even fuel the HIV epidemic. Limited evidence on the links between infertility, high risk sexual behaviour and HIV/STIs currently exist.

In order to shed more light on risk factors for both male and female infertility and their relative importance in SSA and on the association of infertility with high risk sexual behaviour, STIs and HIV, we conducted a case control study in Kigali, Rwanda, examining potential predictors in socio-demographic characteristics, sexual behaviour, past and current STIs, HIV, life style factors, contraceptive behaviour, and occupational hazards (only men).

Data collection of this study finished in July 2009. Data analysis dissemination of results is almost completed.



Photo credit: www.freedigitalphotos.net

3.1.1.14 Evaluation of Treatment Seeking Behaviour for Infertility and Socio-cultural Consequences of Infertility in Rwanda.



Photo credit: www.freeDigitalPhotos.com

Financed by: European and Development Countries Clinical Trials Partnership (EDCTP)
Flemish Interuniversity Council (VLIR-UOS)

Coordinator: ICRH Belgium and Project Ubuzima - Kigali

Partners:

Rwanda: CHUK (Centre Hospitalier Universitaire de Kigali)

United Kingdom: University of Southampton

Budget: 134,467 EUR

Start Date: 1 November 2006

End Date: 31 October 2010

Contact Person at ICRH: Nathalie Dhont
Nathalie.Dhont@UGent.be

Costly infertility treatments are not a priority for the public health sector in most low-resource countries but a call has been made to improve information, education and counselling on issues pertaining causes and treatments of infertility. In order to do this, information about existing perceptions and treatment seeking behaviour is needed. This study examines existing perceptions of infertility causes, treatment seeking behaviour for infertility, factors associated with treatment seeking in medical services and the response of the medical sector in an urban infertile population in Rwanda.

Data come from a hospital based survey of 312 women and 254 male partners in an infertile relationship, presenting themselves for infertility investigations in a research clinic in Kigali. Anthropological research has demonstrated that the psychosocial consequences of infertility are more severe for African couples than for western couples, because of the strong emphasis on childbearing in these traditional societies. Social stigma, divorce, polygamy, depression and ultimately suicide are all recognised as consequences of infertility. In order to elucidate the psychosocial consequences of infertility in the cultural setting of Rwanda 5 focus group discussions were conducted with men and women living in infertile relationships.

Data collection finished in February 2009. Data analysis and dissemination of results is almost completed.

3.1.2 OTHER ACTIVITIES OF THE HIV/STI TEAM

3.1.2.1 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 HIV/AIDS policy. The working group does this by exchanging knowledge, information and experiences in the field of HIV/AIDS and by means of advocacy. In 2010, ICRH continued to take part in a specific working group that supported a study that was making an inventory of all activities in the field of HIV/AIDS supported by official Belgian development aid.

Contact persons at ICRH: Kristien Michielsen (Kristien.Michielsen@ugent.be) and Yves Lafort (Yves.Lafort@ugent.be).

3.1.2.2 BREACH

ICRH is member of the Belgian AIDS and HIV Research Consortium (BREACH). This consortium unites all Belgian AIDS Reference Laboratories (ARLs) and AIDS Reference Centres (ARCs), as well as other organizations that play a significant role in HIV/AIDS-related research or prevention, such as ICRH and Sensoa.

BREACH aims among others at setting up a Belgian HIV/AIDS cohort, that will centralize all data on HIV/AIDS in Belgium and make them available for research purposes. In 2009-2010, the drafting of the cohort protocol was initiated. It will be finalized and become operational in 2011.

Contact person at ICRH: Jessika Deblonde (Jessika.Deblonde@ugent.be)

3.2. ACTIVITIES OF THE GENDER BASED VIOLENCE TEAM

3.2.1 PROJECTS

3.2.1.1 Frame of Reference in SGBV Prevention Against and Among Young Refugees, Asylum Seekers and Unaccompanied Minors in the European Reception & Asylum Sector (SENPERFORTO)

Financed by: European Commission-Daphne Fund
Coordinator: ICRH Belgium
Partners:
Belgium: ICRH - Ghent University Red Cross Flanders Sensoa Fedasil
Portugal: IHMT-Universidade Nova de Lisboa
The Netherlands: Nivel
Ireland: University College of Dublin
Greece: Greek Refugee Council
Malta: Jesuit Refugee Service
Hungary: Menedék
Spain: Servicio Andaluz de Salud Fundacion biomedical de Cadiz
Western Europe: UNHCR
Budget: 374,225 EUR
Start Date: 19 December 2008
End Date: 18 December 2010
Contact Person at ICRH: Ines Keygnaert Ines.Keygnaert@UGent.be



Applying a Community Based Participatory Research Approach, Senperforto aims to enhance the prevention of sexual and gender-based violence (SGBV) in the European Reception and Asylum sector by the development of a European Frame of Reference for Prevention of SGBV in this sector. In 2010 we first conducted a Knowledge, Attitude and Practice (KAP) Survey on SGBV experience, prevention and response among both professionals and young asylum seeking residents in different reception facilities in each of the 8 partner countries (Belgium, Greece, Hungary, Ireland, Malta, the Netherlands, Portugal and Spain). This study helped to fuel the development of the Senperforto Frame of Reference for Prevention of SGBV in the European Reception & Asylum Sector. This Frame of Reference consists of Standard Operating Procedures, a Code of Conduct, a SGBV Prevention Sensitisation Kit (flyers and posters) and a Make it Work!-Training Manual. The instruments have been pilot-tested in the 8 partner countries and were presented at the final Senperforto Seminar, held in Brussels on December 10th. The Frame of Reference instruments are available in 11 different languages on one DVD. More than 1500 copies have already been disseminated throughout Europe and beyond. Free copies (except for port costs) can be ordered at ICRH.

3.2.1.2 Phenomenological Research on Honour Related Violence in Belgium

Financed by: Belgian Ministry of Home Affairs Institute for the Equality of Women and Men (IGVM)
Coordinator: Vrije Universiteit Brussel (VUB)
Partners:
Belgium: ICRH Belgium Faculty of Criminology (VUB) RHEA Centre for Gender and Diversity (VUB) Academic Medical Centre St Pieters
Budget: 66,833 EUR
Start Date: 1 November 2010
End Date: 1 November 2011
Contact Person at ICRH: Anke Van Vossolle Anke.Vanvossolle@UGent.be

This project was launched in November 2010 and aims at assessing the prevalence of honour related violence in various sectors (education, social assistance, police & justice, and the medical sector), at determining how professionals handle this type of violence, and at making recommendations for each sector to effectively tackle honour related violence.

One part of the research is nationally orientated, and explores the current situation in Belgium through interviews with key actors. Good practices and difficulties will be defined. Another part of the research will be conducted in some European countries that already built knowledge and developed policies in the field of honour based violence (the Netherlands, the United Kingdom and Sweden). The research will determine whether practices and procedures developed abroad will be suitable to guide policy and practice in Belgium.

3.2.1.3 Mapping the Multisectoral Support for Survivors of Sexual Violence in South Kivu Province, DR Congo.

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 in DRC.

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 nongovernmental partner, "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.

Financed by: Flemish Interuniversity Council
Coordinator: ICRH Belgium
Partners:
DR Congo: Université Catholique de Bukavu
Budget: 200,000 EUR
Start Date: September 2010
End Date: September 2012
Contact Person at ICRH: Steven Callens
 Steven.Callens@UGent.be

3.2.1.4 Girls and Women forced into Marriage: Understanding the Impact of Migration on Kenyan and Moroccan communities

The project studies the impact of context on the occurrence of forced marriage in Kenya and Morocco, and among immigrants with a similar background in Belgium and the UK. 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 2010 a literature review was performed on the impact of laws & policies on forced marriage in Europe, focusing on the the role of current trends in criminal laws and in immigration policies. Also, the "Managers of Diversity" programme of the Flemish government has provided additional funds for the Belgian research activities. This allows for the application of a more in-depth approach using the Intergenerational Dialogue method.

Financed by: VLIR-UOS (Vlaamse Inter-universitaire Raad - University Development Cooperation)
Coordinator: ICRH Belgium
Partners:
Morocco: Université Mohammed V
United Kingdom: Foundation for Women's Health, Research and Development (Forward UK)
Kenya: ICRH Kenya
Budget: 66,833 EUR
Start Date: 1 October 2009
End Date: 30 September 2013
Contact Person at ICRH: Alexia Sabbe
 Alexia.Sabbe@UGent.be

3.2.1.5 International Training Course 'Multi-Sectoral Response to Gender-Based Violence in Humanitarian Settings'



Financed by: Flemish Inter-University Council (VLIR)
 European Commission
 Humanitarian Aid Department (ECHO)
Coordinator: ICRH Belgium
Partners:
UN: United Nations Population Fund (UNFPA)
Budget: 100,000 EUR
Start Date: 1st of November 2010
End Date: 12th of November 2010
Contact Person at ICRH: Anke Van Vosssole
 Anke.Vanvossole@UGent.be

From November 1st till November 11th 2010, the fourth edition of the International Training Course 'Coordination of Multi-Sectoral Response to Gender-Based Violence in Humanitarian Settings' was organized in Ghent. Based on international developments, and experiences of humanitarian workers in the field, we can conclude that this international training course continues to meet an urgent need for more trained experts on GBV Coordination. The course aims to improve knowledge, understanding, and communication skills to effectively prevent and respond to gender-based violence (GBV) in humanitarian settings, and to build capacity to coordinate multi-sectoral responses to GBV in humanitarian settings. A total number of 22 humanitarian high-level professionals participated in the course, working in emergency or (post)conflict environments in 17 countries. Their organizations included UN agencies, government organizations and national or international NGO's. The different settings the participants were active in, enhanced their opportunities to learn from each other's experiences. At present nearly 100 humanitarian professionals have been trained, working at over 30 countries in emergency and (post)conflict situations. Capacity building and rolling out of the course in local settings will continue to be a priority for the organizers.

3.2.1.6 Focal Point on Harmful Cultural Practices (FOHCUS)

Financed by: Flemish Government

Coordinator: ICRH Belgium

Partners:

Budget: 69,364 EUR

Start Date: April 1, 2010

End Date: March 31, 2011

Contact Person at ICRH: Els Leye

Els.Leye@UGent.be



FOHCUS 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. The objectives are:

- To increase knowledge and understanding of harmful cultural practices;
- To stimulate debate and critical reflection of harmful cultural practices;
- To improve services and interventions targeted at reducing the harmful effects of HCPs;
- To advise policies and regulations regarding harmful cultural practices;
- To contribute to a body of scientific data on harmful cultural practices.

In order to address harmful cultural practices in an effective way, an interdisciplinary and multi-track approach is needed, bringing together all available knowledge and experience, tackling blind spots by targeted research projects, building relationships and networks, raising awareness, providing services to professionals and intermediaries, empowering communities and supporting policy makers. The activities of FOHCUS are mainly research, education, service delivery and networking.

- **Research:** our research entails both qualitative and quantitative research on a variety of harmful cultural practices, including female genital mutilation, hymen reconstructions, vaginal cosmetic surgeries and polygamy. The research is intended to provide the basis for policy advice, implementation and/or improvement of services and public debate.
- **Education, training and dissemination of research results:** these activities are provided both for the general public, professionals and students, and envisage to sensitize, inform and increase knowledge. They consist of monitoring Ms and PhD students, providing lectures, the organization of and participation in academic debates, and publication of papers in academic journals and popular media.
- **Service delivery:** Activities in this area include the provision of adequate care and prevention services for those who are affected by or who are at risk of harmful cultural practices. Other services provided include the delivery of expertise for development and implementation of policies and interventions, research, education and training, and sensitization and advocacy efforts regarding harmful cultural practices.
- **Networking:** to frame the research, delivery of services and education, FOHCUS will network with national and international academics and other stakeholders, through organizing joint conferences and debates, writing joint papers and research proposals.

3.2.1.7 DOVE (Domestic Violence Against Women/men in Europe)

The DOVE project aims at:

- Developing a research methodology for the multi-national detection of DV against women and men, its risk factors and effects (e.g. health).
- Describing DV experiences in Europe using a clear definition of DV and an established measure of DV in a randomly selected, representative, proportionally stratified sample of the total population (women/men aged 18-64 years) living in urban centres in 8 EU states.
- Contributing to a public health strategy for managing DV primarily in the 8 participating States by disseminating to key persons the survey findings and the policy or practice solutions.
- Organizing a European symposium for a wider dissemination of the survey findings to relevant governmental stakeholders, but also NGO's and academics.

In 2010 two meetings of the partners in the DOVE project were held:

- During the DOVE meeting in Budapest, 29th-30th of April, the results of the pilot study were presented, and final amendments were made regarding the research tool. The collection of data was scheduled.
- During the DOVE meeting in Hydra, Greece, 27th-28th of September, the progress of the field work was discussed, and it was agreed that each partner would produce a methodology report and a national "policies and practices regarding DV" report.

Financed by: European Commission – DG SanCo
Coordinator: University of Porto, Department of Hygiene and Epidemiology Prof. Dr. Henrique Barros
Partners:
Sweden: Mid Sweden University
Germany: Protestant University of Applied Sciences Ludwigsburg
Spain: University of Granada
Hungary: Hungarian Academy of Sciences
Greece: National School of Public Health
Belgium: Ghent University
United Kingdom: Kingston University & St. George's, University of London
Budget: 999,137 EUR
Start Date: 1 June 2009
End Date: 30 November 2011
Contact Person at ICRH: Lucas Verhaegen
 Els Leye
 Els.Leye@UGent.be

3.2.1.8 Partner Violence and Pregnancy, an Intervention Study within Perinatal Care

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 reduce violence during pregnancy.

By means of a written questionnaire, the prevalence/ incidence study measures physical, psychological and sexual partner violence in a pregnant population. Moreover, this study wants to determine if there are effective and safe methods to improve help seeking behaviour, reduce partner violence and hence some negative consequences for mother and child. Therefore, several pregnant victims of partner violence will be 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 seek more help and/or the negative effects of violence on the pregnancy decrease.

In 2010, the first recruitment wave was performed in 7 participating hospitals. Up until now around 650 women filled out the questionnaire and around 30 women are randomised into the RCT.

Financed by: Research Foundation Flanders (FWO), Belgium
Coordinator: ICRH Belgium
Partners:
Belgium: University Hospital Ghent, Dpt. of Ob/Gyn
 ZNA Middelheim Antwerpen
 UZA, OLV ziekenhuis Aalst
 AZ St Jan Brugge
 AZ St Jan Palfijn Ghent
Budget: 999,137 EUR
Start Date: 1 October 2009
End Date: 30 September 2013
Contact Person at ICRH: An-Sofie Van Parys
 Ansofie.Vanparys@UGent.be



Photo credit: www.freedigitalphotos.net

3.2.1.9 A Six Country Study on Life-Events & Fear of Mode of Delivery, Part II. (BIDENS)

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



The first part of this study started in 2007. This study is coordinated by the NTNU in Norway and is a collaboration of six European countries (BIDENS: Belgium, Iceland, Norway, Denmark, Estonia and Sweden). The study-hypothesis is that women who experienced violence during their lifetime, will develop more fear of childbirth and therefore have more instrumental deliveries. Up to this moment over 7000 women were included in the database. In 2009 the study received additional funding to finalise the initial goals of the first part of the study. The aims of this prolongation are to continue the analysis of the collected data and to continue the national and international dissemination of the results. An international seminar has taken place in 2010 and a national seminar is scheduled for 2011. Several articles linked to the BIDENS study have been published (see articles section).

3.2.2 OTHER ACTIVITIES OF THE GBV TEAM

The SGBV team gave several tutorials, training sessions and guest lectures on SGBV topics. For example, the SGBV team organised, in collaboration with UNFPA, the fourth edition of the International Course "Coordination of multi-sectoral response to gender based violence in humanitarian settings".

Members of the SGBV team also participated in research projects such as:

- Study of the prevalence of FGM in Belgium, a study conducted by Tropisch Instituut Antwerpen;
- Excision and migration, a qualitative study on FGM in Belgium, a study conducted by Facultés Saint Louis, Observatoire du Sida;
- French criminological detection of FGM and lessons learned for the Netherlands, a study conducted by the Dutch University of Leiden, Institute for Criminology and Criminal Law.

The SGBV team was an invited expert in the following meetings:

- o Challenges in Sexual Health of migrants in the EU, organised by the World Health Organisation in Madrid, October 2010
- o Global Consultation on Migrant Health, organised by the World Health Organisation, the International Organisation for Migration and the Government of Spain, in Madrid, March 2010

In addition to the national and international conferences and workshops that were organized within the context of the projects listed above, the SGBV team launched the book "Vrouwen onder Druk", in Gent, on the International Women's Day, march 8 2010. The SGBV team organised an international seminar on Prevention of SGBV in the European Reception and Asylum Sector in Brussels in December.

SGBV team members participate in the following advisory committees:

- o Board of European Network for the Prevention of FGM
- o Advisory commission of "END FGM European Campaign – strategy for EU institutions", Amnesty International Ireland

3.3 ACTIVITIES OF THE MATERNAL HEALTH TEAM

Annually, an estimated number of 350 000 women die worldwide from pregnancy or childbirth related causes. Furthermore every year an estimated three and a half 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.

Although 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 especially maternal mortality remains unacceptable high. The MDGs 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. And although new data show signs of progress in improving maternal mortality, this progress is still way below the annual decline needed to meet the maternal MDG target.

The overall objective of the ICRH 'maternal health team' is conducting research to contribute to improving maternal and neonatal health and well-being including the improvement of sexual and reproductive health for women. This research aims to achieve access to good quality maternal, neonatal and reproductive health care for all, with a focus on vulnerable population and the integration and continuity of care. Working with and involving all levels of the society from community level till policy makers is also considered crucial by the maternal health team in order to accomplish its objectives.

3.3.1 PROJECTS

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



Financed by: European Commission – FP7

Coordinator: University of Heidelberg,
Germany

Partners:

Belgium: ICRH Ghent

Burkina Faso: Centre de Recherche en Santé
de Nouna

Ghana: Navrongo Health Research
Centre

Sweden: Karolinska Institute

Greece: Muhimbili University of Health
and Allied Sciences

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

From the estimated 350,000 global maternal deaths per year 52% occur in sub-Saharan Africa. The lifetime risk for a sub-Saharan African woman to die from complications of pregnancy and childbirth is 1 in 22 compared to 1 in 8,000 in industrialized countries. Every year an estimated 3.5 million babies die in the first 4 weeks of life. In addition to a lack of financial and human resources in developing countries, health care is hampered by poor quality of care caused among others by low staff motivation and poor management structures.

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 system which will help providers to comply with established standards of care.

The QUALMAT programme is implemented by a consortium of 6 partners in Burkina Faso, Ghana and Tanzania; three resource-poor countries highly burdened by maternal and neonatal mortality. In each country, an intervention and a control district were selected. And in each of these districts 7 health facilities were selected to be included in the research project.

As part of this project ICRH is responsible for measuring changes in the quality of care and services caused by the QUALMAT intervention package. During 2010 the data collection needed for the baseline quality assessment was conducted at the 3 African research sites.

3.3.2 OTHER ACTIVITIES OF THE MATERNAL HEALTH TEAM

3.3.2.1 Mid-term review of Danish development assistance to SRHR during the last 3 years implementation of the strategy, a consultancy for Danida (Danish Ministry of foreign Affairs)

The consultancy was conducted together with 2 independent consultants: Matthew Chersich and Birte Holm Sørensen. The consultancy took place between January 2010 and September 2010 and included a desk study reviewing the Danish development assistance to SRHR during the last 3 years and a case study from 2 countries (Kenya and Tanzania) who receive Danish SRHR funding. The case studies included a field visit to the countries under study. The final results and report of this consultancy were presented by Prof. Marleen Temmerman, Birte Holm Sørensen and Els Duysburgh in September 2010 at the Danish Ministry of Health in Copenhagen, Denmark.

3.3.2.2 ICRH Seminar in Shanghai

The East Flemish week in the Belgian Pavilion at the Shanghai World Exhibition took place from August 22nd until August 27th 2010, 2 days were dedicated to Ghent University. A seminar on "Working together for better health tomorrow" was organized by ICRH in collaboration with Fudan University. Prof. Marleen Temmerman and Dr. Wei-Hong Zhang from ICRH attended and gave a presentation on the main results of three research projects in China under FP6: PAFP (Post Abortion Family Planning services in China); CHIMACA (China Maternal Health Care in rural areas); and YOLAMI (Young Labour Migrants in China). Results were discussed. The seminar attracted nearly 100 people from all over China, from universities, government bodies, NGO's, clinicians and international participants. (Photo: Rector of Ghent University, Prof. Paul Van Cauwenberge, Prof. Marleen Temmerman and Wei-Hong Zhang in Shanghai Expo).



3.3.2.3 Conference on 'Post-Abortion Contraception'

The first China Obstetrics & Gynaecology Hospital President Forum on the theme of 'Post-Abortion Contraception' (PAC) was held in Shanghai on 28th August 2010. This Forum was organized by ICRH in collaboration with the Society of Family Planning, Chinese Medical Association, China. Nearly 40 Presidents of Hospitals from all over China attended the Forum. Prof. Marleen Temmerman and Dr. Wei-Hong Zhang from ICRH presented the results of the PAFP study (Post Abortion Family Planning services in China) which was an EU funded FP6 project coordinated by ICRH and carried out between 2006-2009 in three large cities in China. China's abortion rate has remained at high levels during the last decade, with on average 8 million cases per year, which is much higher than most European developed countries. The PAFP study showed that the abortion and repeat abortion rates have significantly decreased by providing post-abortion family planning services. The aim of the Forum was to share experiences between participants and prepare the implementation of Post-Abortion Family Planning services at national level in China. This event has been widely reported by Chinese media: [<http://www.UG-ICRH.org/files/ChineseMedia-PAC%2028thOct2010event.pdf>].



3.4 ACTIVITIES OF THE HEALTH SYSTEMS TEAM

3.4.1 PROJECTS

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



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

Teenagers in Latin America are confronted with serious sexual and reproductive health problems and are at major risk for HIV and sexually transmitted infections, and for unwanted pregnancies, leading to a higher number of unsafe abortions and increased maternal health risk.

During the first stage (2009) the consortium searched for a better understanding of the socio-economic factors that shape reproductive and sexual health and healthcare policy in Latin America. Through qualitative research and a documental analysis the consortium mapped the sexual and reproductive health situation of the adolescents and its determining factors. Based on those data a comprehensive strategy for community-embedded interventions will be developed in three Latin American cities: Cochabamba, Cuenca and Managua. The interventions will target an improved access to adolescent-friendly reproductive health care in primary health services, a supporting and enabling environment and a strengthened adolescent competence to make healthy reproductive health choices. A strong emphasis will be placed on the use of the Internet to reach adolescents. The strategy will then be implemented and tested on its impact and applicability. The analysis of the implementation processes and the evaluation results will help to develop a framework for community-embedded interventions that improve the responsiveness of health systems to health needs. Policy-makers will be continuously involved in the research project as part of the project's strategy to bridge the gap between health research and health policies. For more information see www.proyectocerca.org

3.4.1.2 Quality Healthcare in Primary Health Services in Nicaragua

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. Since 2007, the Ministry of Health of Nicaragua is gradually implementing a new model of care in public primary health services (MOSAFIC, modelo de salud familiar y comunitaria) that aims towards a more comprehensive, equal and accessible care. The idea for this research project arose from the concern of researchers and academics of the UNAN in maintaining the benefits of the previous reproductive health programmes within the new model of primary health care. Action Research is the main methodology.

In 2010 qualitative data resulting from in depth interviews and focus group discussions with patients, health providers and community members were analysed. The general conclusion is that the unpredictability of the health services offered and the characteristics of the provider-patient communication determine the perceptions on the quality of care. The conclusions have been reported in a document

addressing Nicaraguan policy makers. A scientific article will be submitted in the course of 2011. Based on the results of the qualitative analyses an intervention strategy has been developed targeting on communication in health, on conflict management and on transparency in the pharmacy supply. Since November 2010 the interventions are progressively implemented in three health centres and will be continuously monitored.

Financed by: VLIR-UOS (Vlaamse Interuniversitaire Raad - University Development Cooperation)
(Own initiative-programme)

Coordinator: ICRH Belgium

Partners:
Nicaragua: Universidad Nacional Autónoma

Budget: 306,758 EUR

Start Date: 1 October 2008

End Date: 30 September 2012

Contact Person at ICRH: Sara Demeyer
Sara.Demeyer@UGent.be
Peter Decat
Peter.Decat@UGent.be



3.4.2 OTHER ACTIVITIES OF THE HEALTH SYSTEMS TEAM

3.4.2.1 Be-cause Health

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. ICRH presides within Be-cause health the working group on People Centred Care. In People Centred Care, the health needs of the individual and the community are central. It enhances care which puts the expectations, feelings and environment of the patient and the community first. People Centred Care takes into account the social determinants of health. The community, patients and care providers are equal partners with a shared responsibility. In 2010 the working group realized a mapping of the initiatives of the Belgian actors in the field of People Centred Care and collected relevant sources and documents. (see www.be-causehealth.be).

Contact person at ICRH: Peter Decat (Peter.Decat@ugent.be)

3.4.2.2 Round Table Conference on Sexual and Reproductive Health for Vulnerable Migrants in Flanders

The health systems team of ICRH, Sensoa and the institute for Tropical Medicine are preparing a round table with different stake holders, scheduled for the 17th of June 2011. In the third trimester of 2010 ICRH was actively involved in the collection of relevant documents and the consultation of experts with the aim to draw up a work document describing the needs and determining factors.

Contact person at ICRH: Sara Demeyer (Saraa.Demeyer@ugent.be)



3.5 HPV/CERVICAL CANCER TEAM

The HPV/cervical cancer team comprises researchers from ICRH Belgium, involved in human papilloma virus (HPV) research. The team is a recent spin-off from the broader HIV/STI research team and counts 4 core members. The objectives of the team include coordination of research activities in the field of HPV/cervical cancer in Belgium, but also in Kenya. The HPV team is characterized by a broad range of scientific activities, ranging from social sciences to fundamental laboratory research.

3.3.1 PROJECTS

3.5.1.1 SEHIB

The introduction of the HPV vaccine could lead to a change in the distribution of HPV types in the population. The vaccines include the types 16 and 18 causing the majority of all cervical cancer cases (~70%). Therefore monitoring and surveillance of the HPV type distribution after the introduction of the vaccine is a necessary. In addition, cross-protection (protection of the vaccine against disease associated with types other than the vaccine types) could 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 proposal 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.

Financed by: Sanofi Pasteur
Coordinator: ICRH Belgium
Partners:
Belgium: Belgian Universities
 Labo Riatol
 Institute for Public Health
Budget: 1,007,555 EUR
Start Date: December 2009
End Date: September 2012
Contact Person at ICRH: Davy Vanden Broeck
 Davy.Vandenbroeck@UGent.be

This population-based, cross-sectional study has a duration of 3 years and will be conducted 5 times. Study samples will be 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 interaction of HPV vaccination on the correlation of HPV infection and cytology/histology will be studied.

3.5.1.2 Interaction HPV and bacterial vaginosis

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 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 will be subject 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.

Financed by: FWO
Coordinator: ICRH Belgium
Partners:
Kenya: ICRH Kenya
Budget: 234,000 EUR
Start Date: October 2008
End Date: September 2011
Contact Person at ICRH: Davy Vanden Broeck
 Davy.Vandenbroeck@UGent.be

3.5.1.3 Acceptability of Visual Inspection with Acetic Acid, Pap Smear and HPV Vaccination as Preventive Measures for Cervical Cancer (Kenya)

Financed by: Fund for Scientific Research
Flanders, FWO

Coordinator: ICRH Belgium

Partners:

Kenya: Moi University
ICRH Kenya

Budget: 170,000 EUR

Start Date: 1 October 2010

End Date: 30 June 2014

Contact Person at ICRH: Heleen Vermandere
Heleen.Vermandere@UGent.be

Cervical cancer, caused by the oncogenic human papillomavirus (HPV), has a very high incidence in Kenya (12.7/100,000 a year). As in many resource-limited settings, screening for precancerous lesion is rare (3.2% of all women get screened every 3 years) and access to treatment is limited. With the development of vaccines, primary prevention has become possible. However, prior to implementing large-scale vaccination programmes, several knowledge gaps need to be addressed. In Kenya, little is known about acceptability and users' perspectives regarding HPV prevention; low uptake levels of screening reflect the existence of various barriers.

Studies assessing acceptability of the vaccines, mostly defined by 'willingness to obtain', have mainly been carried out in developed countries among parents and young women. Generally, they indicate high levels of interest in HPV immunization. This does not guarantee however that other cultures will embrace HPV vaccination.

In addition, cervical cancer is the leading reason of cancer mortality in Kenya (8.6/100,000 women a year). Many women in sub-Saharan Africa present themselves when the cancer is at advanced stage, unsuitable for surgery and with little chance of recovery from radiotherapy. Less than 10% of women with cancer present earlier than stage IIA in Kenya. Women endure abnormal bleeding and discharge months before they look for appropriate health care.

In order to optimize cervical cancer prevention, diagnosis and treatment strategies and in order to make best use of the techniques available, it is crucial to understand the acceptability and the users' perspectives towards vaccination and screening. Understanding the mechanisms of decision-making regarding preventive medicine at individual level, as well as at the level of the healthcare provider is needed in order to better prepare future HPV vaccination and cervical cancer screening programs. In addition, barriers for implementing different prevention and diagnosis techniques need to be identified. An ongoing VLIR-IUC (Interuniversity collaboration) with the Moi University (Eldoret, Kenya) provides a long-lasting collaboration with all Flemish universities (VLIR). Within this framework, a work package Health was created, which main activity is a 10 year demographic surveillance in this area. Reproductive health (including HPV research) is planned as special research topic and one of the surveillance waves will focus on HPV related issues. We intend to gather data regarding knowledge and awareness of cervical cancer and acceptability of HPV prevention and cervical cancer screening. In addition qualitative research will be performed at community level, health care provider level and at policy level. The study will cover a rural area (Eldoret) as well as an urban area (Mombasa).

3.5.1.4 Correlation between HPV Infection and Bacterial Vaginosis: Meta-analysis

Financed by: UGent

Coordinator: ICRH Belgium

Partners:

Belgium: Free University of Brussels (VUB)

Budget: 1,007,555 EUR

Start Date: 1 October 2010

End Date: 30 September 2013

Contact Person at ICRH: Davy Vanden Broeck
Davy.Vandenbroeck@UGent.be

Background: Bacterial vaginosis (BV), an alteration of vaginal flora involving a decrease in Lactobacilli and predominance of anaerobic bacteria, is among the most common cause of vaginal complaints for women of childbearing age. It is well known that BV has an influence in acquisition of certain genital infections. However, association between BV and cervical human papillomavirus (HPV) infection has been inconsistent among studies. The objective of this meta-analysis of published studies is to clarify and summarize published literature on the extent to which BV is associated with cervical HPV infection.

Methods: Medline and Web of Science were systematically searched for eligible publications until December 2009. Articles were selected based on inclusion and exclusion criteria. After testing heterogeneity of studies, meta-analysis was performed using random effect model.

Results: Twelve eligible studies were selected to review the association between BV and HPV, including a total of 6,372 women. The pooled prevalence of BV was 32%. The overall estimated odds ratio (OR) showed a positive association between BV and cervical HPV infection (OR, 1.43; 95% confidence interval, 1.11-1.84).

Conclusion: This meta-analysis of available literature resulted in a positive association between BV and uterine cervical HPV infection.

3.5.1.5 Management of SIL in HIV Positive Women

Infection with HPV is often a co-infection with an HIV infection. HPV and related diseases can be found more frequently in HIV-positive women, and this infection tends to evolve faster, more aggressive and leaves less options for screening and successful treatment. Therefore, it is important to gain insight in the behaviour of HPV infection in HIV positive women and to develop a scheme how to prevent cervical disease in this population.

Therefore, this project aims 1) to assess if cryotherapy is more effective than regular follow-up for the management of LSIL in HIV positive women; 2) to assess if this effect is different in HIV+ than in HIV- women; 3) to measure the effect of HIV and HPV on regression, persistence and progression of LSIL; 4) to measure the effect of cryotherapy on HPV shedding and insertion and on HIV shedding. A cohort of 75 HIV positive women was set up and followed up for 1 year (every 6 months). This prospective, colposcopy controlled study enrolled HIV-positive women with abnormal cytology. Women with a high grade dysplasia are treated with loop electrical excision procedure; women with histological confirmed CIN 1 were not treated but receive follow-up to monitor disease progression.

Financed by: FWO
Coordinator: ICRH Belgium
Partners:
Belgium: Antwerp University
Kenya: ICRH Kenya
Budget: 340,000 EUR
Start Date: 1 October 2002
End Date: 30 September 2010
Contact Person at ICRH: Davy Vanden Broeck
 Davy.Vandenbroeck@UGent.be

Insights were gained in the distribution of HPV in HIV positive women, including information on HPV types and viral load in HIV positive women with precancerous lesions of the cervix, before and after treatment. Furthermore, recurrence and progress rate after treatment of high grade lesions and progression rate of low grade lesions were described.

3.5.1.6 Influence of Prior Knowledge of HPV DNA on the Cytological Cervical Cancer Screening

Objective: To investigate whether knowledge of human papillomavirus (HPV) DNA test results increases sensitivity of guided cytology screening for the detection of CIN2 or higher grade cervical lesions.

Study design: Prospective colposcopy-controlled study of 2,905 BD Sure-Path® samples, to identify cases with CIN2+ within a 24-month follow-up period. Sensitivity and specificity to detect CIN2+ was evaluated, comparing guided cytology screening with and without prior knowledge of HPV status. Results: Prior knowledge of HPV status resulted in significantly higher detection rate of CIN2+ compared to screening blinded to HPV status ($P=0.005$) with limited loss of specificity ($P=0.026$). Gain in sensitivity is higher in older women (43.8%, $P=0.008$) versus in younger women (10.2%, $P=0.317$), whereas loss of specificity is more pronounced in younger women ($P<0.001$) versus older women ($P=0.729$).

Financed by: UGent
Coordinator: ICRH Belgium
Partners:
Belgium: RIATOL
 Antwerp University
 Institute for Public Health
Budget: 12,000 EUR
Start Date: 1 March 2010
End Date: 30 October 2013
Contact Person at ICRH: Davy Vanden Broeck
 Davy.Vandenbroeck@UGent.be

Conclusion: Guided cytological screening performed with prior knowledge of HPV status results in an improved detection of CIN2 or higher grade lesions.

3.5.2 OTHER ACTIVITIES OF THE HPV/CERVICAL CANCER TEAM

3.5.2.1 Writing of the WHO Cervical Cancer Screening Guidelines

As a WHO collaborating centre, ICRH actively participates in the development and translation of novel insights into guidelines. In 2010, an essential update on the existing guidelines was done by WHO and ICRH participated in this effort. Indeed, with emerging new techniques, novel screening algorithms need to be implemented.

Contact person at ICRH: Davy Vanden Broeck (Davy.Vandenbroeck@ugent.be)

3.5.2.2 Launch of the 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 (Davy.Vandenbroeck@ugent.be), Heleen Vermandere (Heleen.Vermandere@ugent.be)

3.5.2.3 VLIR-Moi IUC Collaboration

Within a long-lasting collaboration between VLIR 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. During this year, the collaboration was set up and in total 3 PhD Projects initiated.

Contact person at ICRH: Davy Vanden Broeck (Davy.Vandenbroeck@ugent.be), Heleen Vermandere (Heleen.Vermandere@ugent.be)



3.6 NON-TEAM RELATED ACTIVITIES

3.6.1 Knooppunt (“Junction”)

The aim of this project is to consolidate ICRH as focal point for sexual and reproductive health and rights, by which it contributes to the international recognition of the Flemish region. The following strategic aims have been formulated:

- To increase the national and international visibility of ICRH
- To reinforce and develop national and international collaborative efforts regarding scientific research and regarding knowledge transfer through education and training
- To enhance the applicability of scientific research through service delivery and through policy support
- To participate in a broad scientific and societal debate on sexual and reproductive health and rights through participation in national and international networks and in discussion fora.

In 2010, ICRH met the above mentioned aims through the following activities:

- ICRH established 52 national and international research projects and collaborations with national and international organizations
- ICRH organized or participated actively in 19 national guest lectures and 7 international training initiatives
- ICRH participated in 8 expert meetings
- ICRH organized 14 conferences/workshops/symposia

ICRH participated in 40 conferences/workshops/symposia and 15 networks/discussion fora.

3.6.2 FWO international Coordination

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.

The themes included in these terms of reference concern HIV/AIDS in women and children; prevention and management of cervical cancer; female genital mutilation; research capacity building; violence against women.

In 2010, ICRH and its partners were involved in several international research projects and capacity building programmes, including Interuniversity Collaborations with the University of Western Cape in South Africa, Jimma University of Ethiopia and the University of Eduardo Mondlane in Mozambique. ICRH was also active as a focal point for the reproductive health activities in the framework of the Institutional Interuniversity Collaboration with MOI University in Kenya.

In 2010, ICRH was involved in 27 running international research projects in the following countries: Burkina Faso, Ethiopia, Ghana, Kenya, Morocco, Mozambique, Rwanda, Tanzania, South Africa, Nicaragua, China, Belgium, the Netherlands, UK, Germany, Ireland, Portugal, Greece, France, Spain, Malta, Hungary, Denmark, Estonia, Sweden, Iceland and Norway. In 2010, ICRH started 4 international research projects in the following countries: Congo, Kenya, Bolivia, Ecuador, Nicaragua, Belgium, the Netherlands, Lithuania and the UK.

Financed by: Flemish Government
Coordinator: ICRH Belgium

Partners:

Budget: 412,500 EUR

Start Date: 1 January 2007

End Date: 31 December 2011

Contact Person at ICRH: Els Leye
Els.Leye@UGent.be

Financed by: Research Foundation Flanders
Coordinator: ICRH Belgium

Partners:

Budget: 208,800 EUR

Start Date: 1 January 2008

End Date: 31 December 2010

Contact Person at ICRH: Els Leye
Els.Leye@UGent.be

3.6.3 Beyond Figures

Financed by: UGent
Coordinator: ICRH Belgium
Partners:
Budget: 47,950 EUR
Start Date: 1 October 2008
End Date: 30 September 2010
Contact Person at ICRH: Peter Decat
 Peter.Decat@UGent.be



Popularizing scientific research is a topic that, unfortunately, does not seem to be part of the scientific research cycle. With the project 'Popularizing science' ICRH has attempted to give insight to a large audience in its research projects and their results. This resulted in an exposition and a book (English and Dutch versions) entitled 'Beyond Figures' (Dutch title: 'Vanuit de onderbuik'). Central to both products are black-and-white photographs by Liesbet Christiaen, taken in Kenya, Rwanda, Nicaragua and Belgium. These pictures are accompanied by accessible texts that focus on the stories behind people who are involved in ICRH projects.

The exhibition can be borrowed for free, the books are sold at 20 Euro.

3.6.4 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:
Mozambique: University Eduardo Mondlane
Belgium: Ghent University
 University of Antwerp
 Vrije Universiteit Brussel
 Katholieke Universiteit Leuven
 Hasselt University
Budget: 3,480,000 EUR
Start Date (Phase 1): 1 April 2008
End Date (Phase 1): 31 March 2013
Contact Person at ICRH: Yves Lafort
 Yves.Lafort@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 2-years preparatory pre-partner programme and two 5-years partner programmes. The programme consists of 8 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 3 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 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. In 2010, the second year of the first Partner Programme was successfully completed and the third started.

3.6.5 Focusing on Medical Health Problems in (post)Conflict Situations

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 focuses 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.

Financed by: Flemish Interuniversity Council
Coordinator: ICRH Belgium
Partners:
DR of Congo: Université Catholique de Bukavu
Budget: 252,871 EUR
Start Date: April 2011
End Date: April 2013
Contact Person at ICRH: Steven Callens
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3.6.6 Review of the Adolescent Sexual and Reproductive Health (ASRH) and HIV Status, Drivers and Related Response among Out-of-School Young People in East and Southern Africa (ESA) and Development of an Evidence-informed Strategy

Between August and December, a comprehensive review of existing literature on HIV prevention and SRH promotion programmes and approaches for out-of-school youth in ESA was carried out by order of UNFPA.

This consultancy resulted in a background paper on the status and factors affecting ASRH and HIV infection among out-of-school young people including methodologies used to collect information on out-of-school youth, available data sources, and information gaps.

The approaches, gaps and strategic actions for HIV prevention and SRH promotion among out-of-school young people were determined, including best practices and lessons learned.

Recommendations were made for improving and scaling up evidence-informed and results-based programmes for out-of-school youth in the relevant sub-region.

Financed by: United Nations Population Fund (UNFPA)
Coordinator: Dept of African Languages and Cultures
Partners:
Belgium: ICRH Belgium
 UGent Dept of African Languages and Cultures
Budget: 22,289 USD
Start Date: 1 August 2010
End Date: 31 December 2010
Contact Person at ICRH: Kristien Michielsens
 Kristien.Michielsens@UGent.be
 Anke Van Vossole
 Anke.Vanvossole@UGent.be

3.6.7 Research and Education Platform of the Department of Obstetrics and Gynaecology at the Ghent University

ICRH is represented in this platform in order to assure good information exchange and coordination between the two institutions, which are both based in the same hospital, belong to the same faculty and deal with interrelated topics and projects.

Contact person at ICRH: Jessika Deblonde (Jessika.Deblonde@UGent.be)

3.6.8 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 2010, five years before the target date for realisation of the millennium goals, the 2015 coalition has launched an intensive campaign, consisting of television and newspaper ads, brochures, posters, and numerous local activities. The apotheosis of the campaign was the 'Wachtnacht' ('Waiting Night') a major event in Ghent, on September 11, during which more than 15,000 participants 'waited' for the realisation of the MDG. ICRH contributed to the campaign by spreading information to its network and among Ghent University staff and students. Several ICRH staff members assisted as volunteer collaborators in sensitisation activities and in the organisation of the 'Wachtnacht'.



4 Publications

4. Publications

4.1 A1 ARTICLES

Cancer Causes & Control 2010;21(12):2309-13.

The prevalence of human papillomavirus infection in Mombasa, Kenya.

De Vuyst H, Parisi MR, Karani A, Mandaliya K, Muchiri L, Vaccarella S, Temmerman M, Franceschi S, Lillo F.

Abstract

OBJECTIVES: A human papillomavirus (HPV) prevalence survey was done in Mombasa, Kenya, to improve the knowledge of HPV prevalence and genotype distribution in sub-Saharan African countries overall, and in women of different ages.

METHODS: HPV prevalence was assessed using PCR in women older than 15 years attending family planning and mother-child care services.

RESULTS: Among 496 women, HPV prevalence was high (42.3%; 95% CI: 37.9-46.8; world age-standardized). Moreover, 46% of HPV-positive women harbored multiple-type infections. The most common types were HPV58 (10.5% of women), HPV16 (7.7%), HPV53 (6.7%), HPV18 (4.6%), and HPV6 (4.4%), and the prevalence of any high-risk HPV type was 28.8%. HPV prevalence was elevated among all age-groups (range 36.4-45.7%). Independent associations with HPV positivity were found for being in a polygamous marriage (OR = 1.7) and lifetime number of sexual partners (OR for ≥ 3 vs. 1 = 1.5), although they were of only borderline statistical significance.

CONCLUSIONS: These findings differ from other world regions, showing a high HPV burden in all age-groups with a high proportion of multiple-type infections. Our data strengthen the urgency of HPV vaccination in Kenya but also highlight the elevated number of women who would have positive results in an HPV-based screening program in the country.

BMC Infectious Diseases 2010;10:285.

Comparison of different sampling techniques and of different culture methods for detection of group B streptococcus carriage in pregnant women.

El Aila NA, Tency I, Claeys G, Saerens B, Cools P, Verstraelen H, Temmerman M, Verhelst R, Vaneechoutte M.

Laboratory Bacteriology Research, Department of Clinical Chemistry, Microbiology & Immunology, University of Ghent, Ghent, Belgium.

Abstract

BACKGROUND: Streptococcus agalactiae (group B streptococcus; GBS) is a significant cause of perinatal and neonatal infections worldwide. To detect GBS colonization in pregnant women, the CDC recommends isolation of the bacterium from vaginal and anorectal swab samples by growth in a selective enrichment medium, such as Lim broth (Todd-Hewitt broth supplemented with selective antibiotics), followed by subculture on sheep blood agar. However, this procedure may require 48 h to complete. We compared different sampling and culture techniques for the detection of GBS.

METHODS: A total of 300 swabs was taken from 100 pregnant women at 35-37 weeks of gestation. For each subject, one rectovaginal, one vaginal and one rectal ESwab was collected. Plating onto Columbia CNA agar (CNA), group B streptococcus differential agar (GBSDA) (Granada Medium) and chromID Strepto B agar (CA), with and without Lim broth enrichment, were compared. The isolates were confirmed as *S. agalactiae* using the CAMP test on blood agar and by molecular identification with tDNA-PCR or by 16S rRNA gene sequence determination.

RESULTS: The overall GBS colonization rate was 22%. GBS positivity for rectovaginal sampling (100%) was significantly higher than detection on the basis of vaginal sampling (50%), but not significantly higher than for rectal sampling (82%). Direct plating of the rectovaginal swab on CNA, GBSDA and CA resulted in detection of 59, 91 and 95% of the carriers, respectively, whereas subculturing of Lim broth yielded 77, 95 and 100% positivity, respectively. Lim broth enrichment enabled the detection of only one additional GBS positive subject. There was no significant difference between GBSDA and CA, whereas both were more sensitive than CNA. Direct culture onto GBSDA or CA (91 and 95%) detected more carriers than Lim broth enrichment and subculture onto CNA (77%). One false negative isolate was observed on GBSDA, and three false positives on CA.

CONCLUSIONS: In conclusion, rectovaginal sampling increased the number GBS positive women detected, compared to vaginal and/or rectal sampling. Direct plating on CA and/or GBSDA provided rapid detection of GBS that was at least as sensitive and specific as the CDC recommended method of Lim broth subcultured onto non chromogenic agar.

Human Reproduction 2010;25(10):2507-15.

Sexual violence, HSV-2 and HIV are important predictors for infertility in Rwanda.

Dhont N, van de Wijgert J, Luchters S, Muvunyi C, Vyankandondera J, Temmerman M.

Abstract

BACKGROUND: In order to formulate cost-effective health interventions aimed at preventing infertility it is necessary to identify modifiable risk factors for infertility in sub-Saharan Africa. This case-control study examined potential predictors and their population attributable fraction (PAF%) for various infertility types including lifestyle factors, sexual behaviour and reproductive tract infections (RTIs).

METHODS: Sexually active women aged 21-45 year presenting with infertility problems at the infertility clinic of the Kigali University

Teaching Hospital (n = 312), and fertile controls who recently delivered (n = 283) were surveyed together with their male partners. Participants were interviewed about socio-demographic characteristics, sexual behaviours and lifestyle factors, and were tested for HIV and RTIs.

RESULTS: Variables significantly associated with tubal infertility were history of sexual violence [adjusted odds ratio (AOR) 2.41; 95% CI 1.36-4.25]; positive HIV (AOR 2.41; 95% CI 1.36-4.25), herpes simplex virus type 2 (HSV-2; AOR 1.67; 95% CI 1.03-2.71) and Chlamydia trachomatis serology (AOR 1.78; 95% CI 0.99-3.21), and current bacterial vaginosis by Amsel criteria (AOR 1.97; 95% CI 1.12-3.47). Among men, male factor infertility was associated with positive HIV (AOR 2.43; 95% CI 1.31-5.23) and HSV-2 serology (AOR 1.71; 95% CI 1.02-2.87) and current urologic abnormalities (AOR 2.38; 95% CI 1.01-5.31). Positive HSV-2 serostatus carried the greatest PAF% (26%) for tubal infertility, followed by positive HIV serostatus (20%) and history of sexual violence (17%).

CONCLUSIONS: Although temporal relationships are difficult to ascertain, history of sexual violence, HSV-2 infection and HIV infection are important predictors of infertility in Rwanda.

Human Reproduction 2010;25(8):2024-30.

Gender differences and factors associated with treatment-seeking behaviour for infertility in Rwanda.

Dhont N, Luchters S, Ombet W, Vyankandondera J, Gasarabwe A, van de Wijgert J, Temmerman M.

Abstract

BACKGROUND: This study examines perceptions of infertility causes, treatment-seeking behaviour and factors associated with seeking medical care in an urban infertile population in Rwanda, as well as the response of health providers.

METHODS: Between November 2007 and May 2009 a hospital based survey was conducted among 312 women and 254 male partners in an infertile relationship.

RESULTS: Infertility causes based on a medical diagnosis were mentioned by 24% of women and 17% of men. Male infertility awareness was low in both sexes with 28% of men and 10% of women reporting male-related causes. Seventy-four per cent of women and 22% of men had sought care for their infertility in the past. Seeking treatment in the formal medical sector was associated with higher income, being married and infertility duration of more than 5 years in both sexes. In women, higher education and being nulliparous and in men blaming oneself for the infertility was also associated with seeking formal medical care. Participants reported a wide array of treatments they received in the past, often including ineffective or even harmful interventions.

CONCLUSION: Health authorities should invest in improving information, education and counselling on issues pertaining to causes and treatments of infertility, and in drawing up guidelines for the management of infertility at all levels of health care.

AIDS Care 2010;22(8):1012-20.

HIV prevention through sport: the case of the Mathare Youth Sport Association in Kenya.

Delva W, Michielsen K, Meulders B, Groeninck S, Wasonga E, Ajwang P, Temmerman M, Vanreusel B.

Abstract

Sport has become a popular tool for HIV prevention, based on claims that it can foster life skills that are necessary to translate knowledge, attitudes and behavioural intentions into actual behaviour. Empirical evidence of the effectiveness of sport-based HIV prevention programmes is, however, sorely lacking. We therefore conducted a cross-sectional survey assessing sexual behaviour and the determinants thereof among 454 youth of the Mathare Youth Sport Association (MYSA) in Kenya and a control group of 318 non-MYSA members. Multiple (ordinal) logistic regression models were applied to measure the association between MYSA membership and attitudes, subjective norms and self-efficacy related to condom use as well as sexual experience, age at sexual debut, condom use, history of concurrent relationships and number of partners in the last year. MYSA members were more likely to use condoms during the first sex act (odds ratio (OR)=2.10; 95% CI: 1.10-3.99). Consistent condom use with the current/last partner was 23.2% (36/155) among MYSA members vs. 17.2% (17/99) among the control group. Even after adjusting for media exposure - a factor associated with both MYSA membership and higher frequency of condom use - MYSA members were still found to use condoms more frequently with their current/last partner (adjusted OR=1.64; 95% CI: 1.01-2.68). Nevertheless, levels of condom use remain disturbingly low. More rigorous evaluations of sport programmes for HIV prevention are needed. When possible, programmes should be preceded by baseline assessments, trends in risk behaviour of the intervention group should be compared with those of a control group, and protocols for data collection and analysis should include measuring of and adjusting for potentially confounding factors.

BMC Health Services Research 2010;10:144.

Reproductive health services for populations at high risk of HIV: Performance of a night clinic in Tete province, Mozambique.

Lafort Y, Geelhoed D, Cumba L, Lázaro CD, Delva W, Luchters S, Temmerman M.

Abstract

BACKGROUND: Different models exist to provide HIV/STI services for most-at-risk populations (MARPs). Along the Tete traffic corridor in Mozambique, linking Malawi and Zimbabwe, a night clinic opening between 4 and 10 PM was established targeting female sex workers (FSW) and long-distance truck drivers (LDD). The clinic offers free individual education and counselling, condoms, STI care, HIV testing, contraceptive services and outreach peer education. To evaluate this clinic model, we assessed relevance, service utilization, efficiency and sustainability.

METHODS: In 2007-2009, mapping and enumeration of FSW and LDD was conducted; 28 key informants were interviewed; 6 focus

group discussions (FGD) were held with FSW from Mozambique and Zimbabwe, and LDD from Mozambique and Malawi. Clinic outputs and costs were analyzed.

RESULTS: An estimated 4,415 FSW work in the area, or 9% of women aged 15-49, and on average 66 trucks stay overnight near the clinic. Currently on average, 475 clients/month visit the clinic (43% for contraception, 24% for counselling and testing and 23% for STI care). The average clinic running cost is US\$ 1408/month, mostly for human resources. All informants endorsed this clinic concept and the need to expand the services. FGD participants reported high satisfaction with the services and mentioned good reception by the health staff, short waiting times, proximity and free services as most important. Participants were in favour of expanding the range of services, the geographical coverage and the opening times.

CONCLUSIONS: Size of the target population, satisfaction of clients and endorsement by health policy makers justify maintaining a separate clinic for MARP. Cost-effectiveness may be enhanced by broadening the range of SRHR-HIV/AIDS services, adapting opening times, expanding geographical coverage and targeting additional MARP. Long-term sustainability remains challenging and requires private-public partnerships or continued project-based funding.

AIDS Care 2010;22(2):187-94.

Implementation of clinic-based modified-directly observed therapy (m-DOT) for ART; experiences in Mombasa, Kenya.

Munyao P, Luchters S, Chersich MF, Kaai S, Geibel S, Mandaliya KN, Temmerman M, Rutenberg N, Sarna A.

Abstract

The effectiveness of modified-directly observed therapy (m-DOT), an adherence support intervention adapted from TB DOTS programmes, has been documented. Describing the implementation process and acceptability of this intervention is important for scaling up, replication in other settings and future research. In a randomized trial in Mombasa, Kenya, patients were assigned to m-DOT or standard of care for 24 weeks. m-DOT entailed twice weekly visits to a health centre for medication collection, ongoing adherence counselling and nurse-observed pill ingestion. Community health workers (CHWs) traced non-attendees, observing pill taking at participant's home. Using process indicators and a semi-structured questionnaire, implementation of m-DOT was evaluated among 94 participants who completed 24 weeks m-DOT (81%; 94/116). Two-thirds of m-DOT recipients were female (64%; 74/116) and a mean 37 years (SD = 7.8). Selection of the m-DOT observation site was determined by proximity to home for 73% (69/94), with the remainder choosing sites near their workplace, or due to perceived high-quality services. A median 42 of 48 scheduled m-DOT visits (IQR = 28-45) were attended. Most found m-DOT is very useful (87%; 82/94) and had positive attitudes to the services. A high proportion received CHWs home visits (96%; 90/94) and looked forward to these. Use of CHWs and several satellite observation sites facilitated provision of services closer to patient's homes. A substantial number, however, thought 24 weeks of m-DOT was too long (43%; 42/94). Our experience suggests that m-DOT services could be implemented widely and are acceptable if delivered with adequate attention to coordination, provision of a broad set of interventions, shifting tasks to less-specialized workers and integration within the health system. m-DOT programmes should utilise existing resources while simultaneously expanding capacity within communities and the public sector. These findings could be used to inform replication of such services and to improve the design of m-DOT in future studies.

AIDS 2010;24(8):1193-202.

Effectiveness of HIV prevention for youth in sub-Saharan Africa: systematic review and meta-analysis of randomized and nonrandomized trials.

Michielsen K, Chersich MF, Luchters S, De Koker P, Van Rossem R, Temmerman M.

Comment in:

AIDS. 2010 Aug 24;24(13):2140.

AIDS. 2010 Aug 24;24(13):2140-2.

Abstract

OBJECTIVE: Systematically assess the effectiveness of HIV-prevention interventions in changing sexual behaviour of young people (10-25 years) in sub-Saharan Africa.

METHODS: Three online databases were searched using prespecified terms. Additional articles were identified on websites of international organizations and by searching bibliographies. Randomized and nonrandomized trials of interventions aiming to reduce risk behaviour were included as well as single-arm studies reporting effects of differential exposure to an intervention. Data were extracted independently in duplicate using predefined data fields.

RESULTS: 31 studies on 28 interventions met the inclusion criteria, including 11 randomized trials. Difficulties with implementing planned activities were often reported and differential exposure to intervention was high. 217 outcome measures were extracted: 88 early (within 1 year of intervention) and 129 late outcomes (more than 1 year after the end of the intervention). Sex education and condom promotion among youth did not increase sexual behaviour as well as risky sexual behaviour. No positive effects on sexual behaviour were detected either and condom use at last sex only increased among males [relative risk = 1.46; 95% confidence interval = 1.31-1.64]. One study reported a reduction of herpes simplex virus-2, but not HIV incidence.

CONCLUSION: There remains a stark mismatch between the HIV burden in youth and the number of attempts to design and test prevention interventions - only two trials report biological outcomes. More effective interventions targeting youth are needed. Attention should go to studying implementation difficulties, sex differences in responses to interventions, determinants of exposure to interventions and perhaps inclusion of other factors apart from HIV/AIDS which influence sexual behaviour.

BMC Infectious Diseases 2010;10:81.***The epidemiology of bacterial vaginosis in relation to sexual behaviour.***

Verstraelen H, Verhelst R, Vaneechoutte M, Temmerman M.

Abstract

BACKGROUND: Bacterial vaginosis (BV) has been most consistently linked to sexual behaviour, and the epidemiological profile of BV mirrors that of established sexually transmitted infections (STIs). It remains a matter of debate however whether BV pathogenesis does actually involve sexual transmission of pathogenic micro-organisms from men to women. We therefore made a critical appraisal of the literature on BV in relation to sexual behaviour.

DISCUSSION: *G. vaginalis* carriage and BV occurs rarely with children, but has been observed among adolescent, even sexually non-experienced girls, contradicting that sexual transmission is a necessary prerequisite to disease acquisition. *G. vaginalis* carriage is enhanced by penetrative sexual contact but also by non-penetrative digito-genital contact and oral sex, again indicating that sex per se, but not necessarily coital transmission is involved. Several observations also point at female-to-male rather than at male-to-female transmission of *G. vaginalis*, presumably explaining the high concordance rates of *G. vaginalis* carriage among couples. Male antibiotic treatment has not been found to protect against BV, condom use is slightly protective, whereas male circumcision might protect against BV. BV is also common among women-who-have-sex-with-women and this relates at least in part to non-coital sexual behaviours. Though male-to-female transmission cannot be ruled out, overall there is little evidence that BV acts as an STD. Rather, we suggest BV may be considered a sexually enhanced disease (SED), with frequency of intercourse being a critical factor. This may relate to two distinct pathogenetic mechanisms: (1) in case of unprotected intercourse alkalinization of the vaginal niche enhances a shift from lactobacilli-dominated microflora to a BV-like type of microflora and (2) in case of unprotected and protected intercourse mechanical transfer of perineal enteric bacteria is enhanced by coitus. A similar mechanism of mechanical transfer may explain the consistent link between non-coital sexual acts and BV. Similar observations supporting the SED pathogenetic model have been made for vaginal candidiasis and for urinary tract infection.

SUMMARY: Though male-to-female transmission cannot be ruled out, overall there is incomplete evidence that BV acts as an STI. We believe however that BV may be considered a sexually enhanced disease, with frequency of intercourse being a critical factor.

Tropical Medicine & International Health 2010;15(5):584-91.***A Safe Motherhood project in Kenya: assessment of antenatal attendance, service provision and implications for PMTCT.***

Delva W, Yard E, Luchters S, Chersich MF, Muigai E, Oyier V, Temmerman M.

Abstract

OBJECTIVES: To investigate uptake and provision of antenatal care (ANC) services in the Uzazi Bora project: a demonstration-intervention project for Safe Motherhood and prevention of mother-to-child transmission of HIV in Kenya.

METHODS: Data were extracted from antenatal clinic, laboratory and maternity ward registers of all pregnant women attending ANC from January 2004 until September 2006 at three antenatal clinics in Mombasa and two in rural Kwale district of Coast Province, Kenya ($n = 25,364$). Multiple logistic and proportional odds logistic regression analyses assessed changes over time, and determinants of the frequency and timing of ANC visits, uptake of HIV testing, and provision of iron sulphate, folate and single-dose nevirapine (sd-NVP).

RESULTS: About half of women in rural and urban settings (52.2% and 49.2%, respectively) attended antenatal clinics only once. Lower parity, urban setting, older age and having received iron sulphate and folate supplements during the first ANC visit were independent predictors of more frequent visits. The first ANC visit occurred after 28 weeks of pregnancy for 30% (5894/19 432) of women. By mid-2006, provision of nevirapine to HIV-positive women had increased from 32.5% and 11.7% in rural and urban clinics, to 67.0% and 74.6%, respectively. Equally marked improvements were observed in the uptake of HIV testing and the provision of iron sulphate and folate.

CONCLUSION: Provision of ANC services, including sd-NVP, increased markedly over time. While further improvements in quality are necessary, particular attention is needed to implement evidence-based interventions to alter ANC utilization patterns. Encouragingly, improved provision of basic essential obstetric care may increase attendance.

Globalization and Health. 2010;6(1):1.***Sex work and the 2010 FIFA World Cup: time for public health imperatives to prevail.***

Richter ML, Chersich MF, Scorgie F, Luchters S, Temmerman M, Steen R.

Abstract

BACKGROUND: Sex work is receiving increased attention in southern Africa. In the context of South Africa's intense preparation for hosting the 2010 FIFA World Cup, anxiety over HIV transmission in the context of sex work has sparked debate on the most appropriate legal response to this industry.

DISCUSSION: Drawing on existing literature, the authors highlight the increased vulnerability of sex workers in the context of the HIV pandemic in southern Africa. They argue that laws that criminalize sex work not only compound sex workers' individual risk for HIV, but also compromise broader public health goals. International sporting events are thought to increase demand for paid sex and, particularly in countries with hyper-endemic HIV such as South Africa, likely to foster increased HIV transmission through unprotected sex.

SUMMARY: The 2010 FIFA World Cup presents a strategic opportunity for South Africa to respond to the challenges that the sex industry poses in a strategic and rights-based manner. Public health goals and growing evidence on HIV prevention suggest that sex work is best approached in a context where it is decriminalized and where sex workers are empowered. In short, the authors argue for

a moratorium on the enforcement of laws that persecute and victimize sex workers during the World Cup period.

PLoS One 2010;5(2):e9119.

Intravaginal practices, vaginal infections and HIV acquisition: systematic review and meta-analysis.

Hilber AM, Francis SC, Chersich M, Scott P, Redmond S, Bender N, Miotti P, Temmerman M, Low N.

Abstract

BACKGROUND: Intravaginal practices are commonly used by women to manage their vaginal health and sexual life. These practices could, however, affect intravaginal mucosal integrity. The objectives of this study were to examine evidence for associations between: intravaginal practices and acquisition of HIV infection; intravaginal practices and vaginal infections; and vaginal infections and HIV acquisition.

METHODOLOGY/PRINCIPAL FINDINGS: We conducted a systematic review of prospective longitudinal studies, searching 15 electronic databases of journals and abstracts from two international conferences to 31(st) January 2008. Relevant articles were selected and data extracted in duplicate. Results were examined visually in forest plots and combined using random effects meta-analysis where appropriate. Of 2,120 unique references we included 22 publications from 15 different studies in sub-Saharan Africa and the USA. Seven publications from five studies examined a range of intravaginal practices and HIV infection. No specific vaginal practices showed a protective effect against HIV or vaginal infections. Insertion of products for sex was associated with HIV in unadjusted analyses; only one study gave an adjusted estimate, which showed no association (hazard ratio 1.09, 95% confidence interval, CI 0.71, 1.67). HIV incidence was higher in women reporting intravaginal cleansing but confidence intervals were wide and heterogeneity high (adjusted hazard ratio 1.88, 95%CI 0.53, 6.69, I(2) 83.2%). HIV incidence was higher in women with bacterial vaginosis (adjusted effect 1.57, 95%CI 1.26, 1.94, I(2) 19.0%) and *Trichomonas vaginalis* (adjusted effect 1.64, 95%CI 1.28, 2.09, I(2) 0.0%).

CONCLUSIONS/SIGNIFICANCE: A pathway linking intravaginal cleaning practices with vaginal infections that increase susceptibility to HIV infection is plausible but conclusive evidence is lacking. Intravaginal practices do not appear to protect women from vaginal infections or HIV and some might be harmful.

Journal of Virological Methods. 2010;165(2):186-97.

Development of an in vitro dual-chamber model of the female genital tract as a screening tool for epithelial toxicity.

Gali Y, Ariën KK, Praet M, Van den Bergh R, Temmerman M, Delezay O, Vanham G.

Abstract

Heterosexual transmission of human immunodeficiency virus (HIV-1) is the predominant mode of infection worldwide. However, the early steps of transepithelial infection still need to be clarified. Using epithelial cells, originating from the female genital tract, and peripheral blood mononuclear cells as subepithelial target cells, an in vitro dual-chamber model of the female genital tract was developed. Remarkably, an intact layer of some cell types (HEC-1A, CaSki and Ect1) served as a protective barrier against cell-free but not against cell-associated HIV-1 that crossed the epithelial barrier through transmigration. Furthermore, dysfunctions of the epithelial layers were assessed by monitoring transepithelial electric resistance and transepithelial passage of FluoSpheres and HIV-1 after treatment with non-oxynol-9 (N-9). Most of the functional assays showed dysfunction of the epithelial barrier at lower concentrations compared to a widely used colorimetric toxicity assay (WST-1). Finally, N-9 treatment caused a significant increase in the production of interleukin-8 (IL-8) and macrophage inflammatory protein-3alpha (MIP-3alpha) and a decrease of Secretory Leukocyte Protease Inhibitor (SLPI) and Monocyte Chemoattractant Protein-1 (MCP-1) in this model. In conclusion, this model is a useful tool to (1) study HIV-1 transmission mechanisms and (2) evaluate epithelial toxicity of candidate microbicides.

European Journal of Public Health. 2010;20(4):422-32.

Barriers to HIV testing in Europe: a systematic review.

Deblonde J, De Koker P, Hamers FF, Fontaine J, Luchters S, Temmerman M.

Abstract

BACKGROUND: In the European Union (EU) and neighbouring countries, HIV/AIDS, of all infectious diseases, has one of the highest morbidity and mortality rates. An estimated 30% of people living with HIV are unaware of their infection, and may therefore not benefit from timely treatment or may transmit HIV to others, unknowingly. Evidence shows that opportunities are being missed to diagnose HIV infections in EU Member States, particularly in regular health care settings. There is a need to better understand the barriers to HIV testing and counselling with the aim to contribute to the decrease of the number of undiagnosed people.

METHODS: A systematic review of literature on HIV testing barriers in Europe was conducted, applying a free text strategy with a set of search terms.

RESULTS: A total of 24 studies published in international peer-reviewed journals and meeting the review's eligibility criteria were identified. Fourteen studies report on barriers at the level of the patient; six on barriers at health care provider level and seven on institutional barriers referring to the policy level. The barriers described are centralized around low-risk perception; fear and worries; accessibility of health services, reluctance to address HIV and to offer the test; and scarcity of financial and well trained human resources.

CONCLUSIONS: Some barriers to HIV testing and counselling have been illustrated in the literature. Nevertheless, there is lack of structured information on barriers considering (i) legal, administrative and financial factors, (ii) attitudes and practices of health care providers and (iii) perception of patients. Such data is critical to improve effectiveness of HIV testing and counselling.

BMC Infectious Diseases 2010;10:18.

Association of HIV infection with distribution and viral load of HPV types in Kenya: a survey with 820 female sex workers.

Luchters SM, Vanden Broeck D, Chersich MF, Nel A, Delva W, Mandaliya K, Depuydt CE, Claeys P, Bogers JP, Temmerman M.

Abstract

BACKGROUND: Human papillomavirus (HPV) and HIV are each responsible for a considerable burden of disease. Interactions between these infections pose substantial public health challenges, especially where HIV prevalence is high and HPV vaccine coverage low.

METHODS: Between July 2005 and January 2006, a cross-sectional community-based survey in Mombasa, Kenya, enrolled female sex workers using snowball sampling. After interview and a gynaecological examination, blood and cervical cytology samples were taken. Quantitative real-time PCR detected HPV types and viral load measures. Prevalence of high-risk HPV was compared between HIV-infected and -uninfected women, and in women with abnormal cervical cytology, measured using conventional Pap smears.

RESULTS: Median age of the 820 participants was 28 years (inter-quartile range [IQR] = 24-36 years). One third of women were HIV infected (283/803; 35.2%) and these women were more likely to have abnormal cervical cytology than HIV-negative women (27%, 73/269, versus 8%, 42/503; $P < 0.001$). Of HIV-infected women, 73.3% had high-risk HPV (200/273) and 35.5% had HPV 16 and/or 18 (97/273). Corresponding figures for HIV-negative women were 45.5% (229/503) and 15.7% (79/503). After adjusting for age, number of children and condom use, high-risk HPV was 3.6 fold more common in HIV-infected women (95%CI = 2.6-5.1). Prevalence of all 15 of the high-risk HPV types measured was higher among HIV-infected women, between 1.4 and 5.5 fold. Median total HPV viral load was 881 copies/cell in HIV-infected women (IQR = 33-12,110 copies/cell) and 48 copies/cell in HIV-uninfected women (IQR = 6-756 copies/cell; $P < 0.001$). HPV 16 and/or HPV 18 were identified in 42.7% of LSIL (32/75) and 42.3% of HSIL (11/26) lesions ($P = 0.98$). High-risk HPV types other than 16 and 18 were common in LSIL (74.7%; 56/75) and HSIL (84.6%; 22/26); even higher among HIV-infected women.

CONCLUSIONS: HIV-infected sex workers had almost four-fold higher prevalence of high-risk HPV, raised viral load and more precancerous lesions. HPV 16 and HPV 18, preventable with current vaccines, were associated with cervical disease, though other high-risk types were more common. HIV-infected sex workers are likely to contribute disproportionately to HPV transmission dynamics in the general population. Current efforts to prevent HIV and HPV are inadequate. New interventions are required and improved implementation of existing strategies.

International Journal of STD & AIDS 2010;21(1):2-7.

Causal links between binge drinking patterns, unsafe sex and HIV in South Africa: its time to intervene.

Chersich MF, Rees HV.

Abstract

South Africa has a massive burden of HIV and alcohol disease, and these pandemics are inextricably linked. Much evidence indicates that alcohol independently influences decisions around sex, and undermines skills for condom negotiation and correct use. Thus, not surprisingly, people with problem drinking in Africa have twofold higher risk for HIV than non-drinkers. Also, sexual violence incidents often coincide with heavy alcohol use, both among perpetrators and victims. Reducing alcohol harms necessitates both population- and individual-level interventions, especially raised taxation, regulation of alcohol advertising and provision of Brief Interventions. Alcohol counselling interventions must include discussion of linkages between alcohol and sex, and consequences thereof. Within positive-prevention services, alcohol reduction interventions could diminish HIV transmission. A trial is needed to definitively demonstrate that reduced drinking lowers HIV incidence. However, given available evidence, implementation of effective interventions could alleviate much alcohol-attributable disease, including unsafe sex, sexual violence, unintended pregnancy and, likely, HIV transmission.

Journal of Acquired Immune Deficiency Syndromes 2010;54(1):35-41.

Effects of highly active antiretroviral therapy duration and regimen on risk for mother-to-child transmission of HIV in Johannesburg, South Africa.

Hoffman RM, Black V, Technau K, van der Merwe KJ, Currier J, Coovadia A, Chersich M.

Abstract

BACKGROUND: Limited information exists about effects of different highly active antiretroviral therapy (HAART) regimens and duration of regimens on mother-to-child transmission (MTCT) of HIV among women in Africa who start treatment for advanced immunosuppression.

METHODS: Between January 2004 to August 2008, 1,142 women were followed at antenatal antiretroviral clinics in Johannesburg. Predictors of MTCT (positive infant HIV DNA polymerase chain reaction at 4-6 weeks) were assessed with multivariate logistic regression.

RESULTS: Mean age was 30.2 years (SD = 5.0) and median baseline CD4 count was 161 cells per cubic millimeter (SD = 84.3). HAART duration at time of delivery was a mean 10.7 weeks (SD = 7.4) for the 85% of women who initiated treatment during pregnancy and 93.4 weeks (SD = 37.7) for those who became pregnant on HAART. Overall MTCT rate was 4.9% (43 of 874), with no differences detected between HAART regimens. MTCT rates were lower in women who became pregnant on HAART than those initiating HAART during pregnancy (0.7% versus 5.7%; $P = 0.01$). In the latter group, each additional week of treatment reduced odds of transmission by 8% (95% confidence interval: 0.87 to 0.99, $P = 0.02$).

CONCLUSIONS: Late initiation of HAART is associated with increased risk of MTCT. Strategies are needed to facilitate earlier identification of HIV-infected women.

AIDS 2010;24(13):2140-2.

Concurrency and the limited effectiveness of behavioural interventions on sexual risk behaviour of youth in sub-Saharan Africa.

Michielsen K, Chersich MF, Luchters S, Van Rossem R, Temmerman M.

Comment on:

AIDS. 2010 May 15;24(8):1193-202.

AIDS. 2010 Aug 24;24(13):2140.

Journal of Virological Methods. 2010;163(2):253-7.

Comparison of the Generic HIV Viral Load assay with the Amplicor HIV-1 monitor v1.5 and Nuclisens HIV-1 EasyQ v1.2 techniques for plasma HIV-1 RNA quantitation of non-B subtypes: the Kesho Bora preparatory study.

Rouet F, Foulongne V, Viljoen J, Steegen K, Becquart P, Valéa D, Danaviah S, Segondy M, Verhofstede C, Van de Perre P; WHO/ANRS 1289 Kesho Bora Study Group.

Collaborators (52)

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Abstract

The implementation of cost effective HIV-1 RNA quantitation assays in resource-poor settings is of paramount importance for monitoring HIV-1 infection. A study comparing the analytical performance of three HIV-1 RNA assays (Generic HIV Viral Load, Amplicor v1.5 and Nuclisens EasyQ v1.2) was performed on 160 plasma samples from 160 consecutive antiretroviral treatment naive HIV-1-infected pregnant women assessed for eligibility in the Kesho Bora trial aimed at prevention of mother-to-child transmission of HIV-1 in three African countries (Burkina Faso, Kenya and South Africa). Correlation and agreement of results of the three assays were assessed for plasma HIV-1 RNA quantitation in specimens harbouring mainly sub-subtype A1, subtype C, and circulating recombinant form (CRF) 02_AG and CRF06_cpx. Good degrees of correlation and agreement were observed between these HIV-1 RNA assays. However, nine (9/160, 5.6%) strains detectable with the Generic HIV Viral Load assay were not detected by either the Amplicor (n=7) or EasyQ (n=2) test. One strain (0.6%) was missed with the Generic HIV Viral Load assay. Further, concordantly positive plasma samples harbouring CRF02_AG and CRF06_cpx yielded significantly higher HIV-1 RNA concentrations when tested by Generic HIV Viral Load, as compared to Amplicor v1.5 (mean differences, +0.33 and +0.67 log₁₀ copies/ml; P=0.0004 and P=0.002, respectively). The Generic HIV Viral Load assay accurately quantified the majority of the non-B HIV-1 subtypes assessed in this study. Due to its low cost (approximately 10 US \$/test), this assay performed with open real-time PCR instruments is now used routinely in the Kesho Bora trial and may be recommended in other African settings.

Journal of Acquired Immune Deficiency Syndromes 2010;55(3):290-8

Dried blood spot HIV-1 RNA quantification using open real-time systems in South Africa and Burkina Faso.

Viljoen J, Gampini S, Danaviah S, Valéa D, Pillay S, Kania D, Méda N, Newell ML, Van de Perre P, Rouet F, World Health Organization/ANRS 1289 Kesho Bora Study Group.

Collaborators (54)

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Abstract

There is an urgent need to assess the accuracy/feasibility of using dried blood spots (DBS) for monitoring of HIV-1 viral load in resource-limited settings. A total of 892 DBS from HIV-1-positive pregnant women and their neonates enrolled in the Kesho Bora prevention of mother-to-child transmission trial conducted in Durban (South Africa) and Bobo-Dioulasso (Burkina Faso) between May 2005 and July 2008 were tested for HIV-1 RNA. The combination Nuclisens extraction method (BioMérieux)/Generic HIV Viral Load assay (Biocentric) was performed using one DBS (in Durban) versus 2 DBS (in Bobo-Dioulasso) on 2 distinct open real-time polymerase chain reaction instruments. DBS HIV-1 RNA results were compared with plasma HIV-1 RNA and HIV serology results used as the gold standards. The limits of detection of assays on DBS were 3100 and 1550 copies per milliliter in Durban and Bobo-Dioulasso, respectively. DBS HIV-1 RNA values correlated significantly with plasma levels (n = 327; R = 0.7351) and were uniformly distributed according to duration of DBS storage at -20°C (median duration, 280 days). For early infant diagnosis, the sensitivity and specificity were 100% (95% confidence interval: 97.2 to 100.0 and 96.5 to 100.0, respectively). HIV-1 viral load kinetics in DNase-pretreated DBS were similar to those obtained in plasma specimens among 13 patients receiving antiretroviral treatment. HIV-1 RNA findings from serial infant DBS collected prospec-

tively (n = 164) showed 100% concordance with HIV serology at 18 months of life. Our findings strongly advocate the implementation of DBS HIV-1 RNA testing in remote areas from low-income and middle-income countries.

Journal of Acquired Immune Deficiency Syndromes 2010;54(5):533-41

Eighteen-month follow-up of HIV-1 infected mothers and their children enrolled in the Kesho Bora study observational cohorts.

Kesho Bora Study Group.

Collaborators (52)

Meda N, Fao P, Ky-Zerbo O, Gouem C, Somda P, Hien H, Ouedraogo PE, Kania D, Sanou A, Kossiwavi IA, Sanogo B, Ouedraogo M, Siribie I, Valéa D, Ouedraogo S, Somé R, Rouet F, Luchters S, Reyners M, Irungu E, Katingima C, Mwaura M, Ouattara G, Mandaliya K, Wambua S, Thiongo M, Nduati R, Kose J, Njagi E, Mwaura P, Bazin B, Rekacewicz C, Taylor A, Flowers N, Thigpen M, Fowler MG, Jamieson D, Read JS, Bork-Simondon K, Cames C, Cournil A, Claeys P, Temmerman M, Van de Perre P, Becquart P, Foulongne V, Segondy M, de Vincenzi I, Gaillard P, Farley T, Habib N, Landoulsi S.

Abstract

OBJECTIVE: To assess the effectiveness and safety of antiretrovirals (ARVs) used for treatment or prophylaxis in a breastfeeding population of HIV-1-infected women (Burkina-Faso, Kenya, South Africa).

METHODS: HIV-1-infected pregnant women with <200 CD4 cells per cubic millimeter or with World Health Organization stage 4 disease (cohort A) and asymptomatic women with >500 CD4 cells per cubic millimeter (cohort B) were enrolled into 2 prospective cohorts. Women with 200-500 CD4 cells per cubic millimeter were enrolled in a parallel randomized trial. Women in cohort A initiated antiretroviral therapy. Women in cohort B received zidovudine from 34 to 36 weeks gestation until delivery, with single-dose nevirapine in labor (cohort B). All children received single-dose nevirapine.

RESULTS: Of 248 women enrolled, 111 (cohort A) and 125 (cohort B) infants alive at 24 hours after birth were analyzed. Sixty-nine percent and 42% of women had undetectable viral load at delivery, respectively. Ten children in each cohort died. The 18-month cumulative incidences of HIV-1 infection were 7.5% (95% confidence interval: 3.8% to 14.5%) (cohort A) and 5.8% (2.8% to 11.8%) (cohort B). Sixty-one percent (cohort A) and 78% (cohort B) were breastfed for a median duration of 20 weeks. Four children in cohort A and only 1 in cohort B became HIV-1 infected after 6 weeks of age.

CONCLUSIONS: Antiretroviral therapy initiated a median of 7 weeks before delivery in women with advanced HIV-1 disease was associated with a significant residual risk of HIV-1 transmission due to insufficient decrease in viral load by the time of delivery. Among women with >500 CD4 cells per cubic millimeter, the risk of breast-milk transmission was very low despite lack of postnatal prophylaxis.

Birth 2010;37(4):267-74

Childhood abuse and fear of childbirth--a population based study.

Lukasse M, Vangen S, Øian P, Kumle M, Ryding EL, Schei B, Bidens Study Group.

Abstract

BACKGROUND: Childhood abuse affects adult health. The objective of this study was to examine the association between a self-reported history of childhood abuse and fear of childbirth.

METHODS: A population-based, cross-sectional study was conducted of 2,365 pregnant women at five obstetrical departments in Norway. We measured childhood abuse using the Norvold Abuse Questionnaire and fear of childbirth using the Wijma Delivery Expectancy Questionnaire. Severe fear of childbirth was defined as a Wijma Delivery Expectancy Questionnaire score of ≥ 85 .

RESULTS: Of all women, 566 (23.9%) had experienced any childhood abuse, 257 (10.9%) had experienced emotional abuse, 260 (11%) physical abuse, and 290 (12.3%) sexual abuse. Women with a history of childhood abuse reported severe fear of childbirth significantly more often than those without a history of childhood abuse, 18 percent versus 10 percent ($p = 0.001$). The association between a history of childhood abuse and severe fear of childbirth remained significant after adjustment for confounding factors for primiparas (adjusted OR: 2.00; 95% CI: 1.30-3.08) but lost its significance for multiparas (adjusted OR: 1.17; 95% CI: 0.76-1.80). The factor with the strongest association with severe fear of childbirth among multiparas was a negative birth experience (adjusted OR: 5.50; 95% CI: 3.77-8.01).

CONCLUSIONS: A history of childhood abuse significantly increased the risk of experiencing severe fear of childbirth among primiparas. Fear of childbirth among multiparas was most strongly associated with a negative birth experience.

S.A.H.A.R.A.-J 2010;7(2):62-70

Perceived stigma among patients receiving antiretroviral treatment: A prospective randomised trial comparing an m-DOT strategy with standard-of-care in Kenya.

Kaai S, Bullock S, Sarna A, Chersich MF, Luchters S, Geibel S, Munyao P, Kishorchandra M, Temmerman M, Rutenberg N.

Abstract

HIV and AIDS remain highly stigmatised. Modified directly observed therapy (m-DOT) supports antiretroviral treatment (ART) adherence but little is known about its association with perceived stigma in resource-constrained settings. In 2003, 234 HIV-infected adults enrolled in a two-arm randomised trial comparing a health centre-based m-DOT strategy with standard self-administration of ART. Data on perceived stigma were collected using Berger's HIV stigma scale prior to starting ART and after 12 months. This was a secondary analysis to examine whether perceived stigma was related to treatment delivery. Perceived stigma scores declined after 12 months

of treatment from a mean of 44.9 (sd=7.6) to a mean of 41.4 (sd=7.7), ($t=6.14$, $P<0.001$). No differences were found between the mean scores of participants in both study arms. Also, no difference in scores was detected using GLM, controlling for socio-demographic characteristics and baseline scores. Findings indicate that a well managed clinic-based m-DOT does not increase perceived HIV-related stigma.

4.2 OTHER ARTICLES

Vanfraechem C, Temmerman M. Illegale abortus en maternale sterfte in Oeganda. *Tijdschrift voor Geneeskunde*, 2010;66(10):501-4.

Sijmons M, Temmerman M. Tienerzwangerschappen in Ecuador. *Tijdschrift voor Geneeskunde*, 2010;66(8):362-5.

Dumont N, Van Den Hecke N, 'T Seyen A. Interview met Marleen Temmerman. *Vrouwen, evolutie: een strijd van vrouwen*. Topic 2010; 20-23.

Van Parys AS, Verstraelen H, Roelens K, Temmerman M. 'Maternal intensive care': a systematic literature review. *Facts, Views and Visions in ObGyn* 2010;2(3):161-7

Esho T, Enzlin P, Van Wolfputte S, Temmerman M. Female Genitale Cutting and Sexual Function: In Search of an Alternate Theoretical Model. *African Identities* 2010;8(3):221-35

4.3 CHAPTERS AND BOOKS

Keygnaert I., Vangenechten J., Devillé W., Frans E. & Temmerman M. Senper–forto Frame of Reference for Prevention of SGBV in the European Reception and Asylum Sector. Magelaan cvba, Ghent 2010, ISBN 978-9078128-205

Keygnaert I. Seksueel geweld tegen vluchtelingen, asielzoekers en mensen zonder wettig verblijf in België en Nederland. In: *Vrouwen onder Druk. Schendingen van de seksuele gezondheid by kwetsbare vrouwen*. Eds Leye E & Temmerman M., Lannoo Campus 2010, pp69-89, ISBN 978 9020985 764.

Wei-Hong Zhang, Joanna Raven, Touhong Zhang, Yuan Shen, Kun Huang, Qian Long, Reija Klemetti, Marleen Temmerman, Elina Hemminki and the CHIMACA study group. Implementation of interventions in the CHIMACA project. THL Discussion paper 13/2010, THL, Helsinki University Print, Helsinki, Finland. <http://www.thl.fi/thl-client/pdfs/682e76d7-c16e-45a7-ab61-6ba2dc611405>

Klemetti Reija, Regushevskaya Elena, Zhang Wei-Hong, Raven Joanna, Long Qian, Huang Kun, Shen Yuan, Wu Zhuochun, Hemminki Elina. New mothers' survey in 2008 in rural China: a CHIMACA report. THL report 23/2010, THL, University print, Helsinki, Finland. The publication can be downloaded at http://groups.stakes.fi/NR/rdonlyres/E4C55881-5B94-4962-A428-74E6D3C6D671/0/RAP023_2010.pdf

Leye E, Temmerman M (eds). *Vrouwen onder druk: schendingen van de seksuele gezondheid bij kwetsbare vrouwen*. Lannoo Campus, 2010, 168p. ISBN 978 9020985 764

Temmerman Marleen, Michielsen Kristien, Decat Peter, Van Braeckel Dirk. *Beyond figures : snapshots from research of sexual and reproductive health*. ICRH, 2010, 100p. ISBN 9789078128182.

Temmerman Marleen, Michielsen Kristien, Decat Peter, Van Braeckel Dirk. *Vanuit de onderbuik : snapshots uit onderzoek naar seksuele en reproductieve gezondheid*. ICRH, 2010, 100p. ISBN 9789078128182.

4.4 PRESENTATIONS AND POSTERS

Keygnaert I., Manço A., Dialmy M. & Temmerman M. (2010) Sexual Violence against sub-Saharan Trans-migrants in Morocco. International Conference on Migrant & Ethnic Minority Health, 27-29th 2010, Pécs, Hungary. (oral presentation)

Keygnaert I., Vettenburg N., Temmerman M. (2010) Hidden Violence is a Silent Rape: A Participatory assessment of sexual & gender-based violence determinants in female and male refugees, asylum seekers and undocumented migrants in Belgium and the Netherlands. International Conference on Migrant & Ethnic Minority Health, 27-29th 2010, Pécs, Hungary. (oral presentation)

Deblonde J, Lucas R, Rüütel K, Hemminki E, Barros H, Hamers FF, Temmerman M. HIV Testing in Europe: The Experience of HIV Diagnosed Patients. XVIII International AIDS Conference (AIDS 2010), Vienna, Austria, 18-23 July 2010

Deblonde J, Meulemans H, Callens S, Temmerman M, Hamers FF. A conceptual framework for analysis of HIV testing policies in Europe. 3rd European Public Health Conference, Amsterdam, Netherlands, 10-13 November 2010

Verhelst R. An update on diagnosis of bacterial vaginosis. Strategy meeting of the Norwegian Society of Medical Microbiology. 4-5 Nov. 2010, Oslo, Norway. (oral presentation)

Geelhoed D, Lafort Y, Siteo M, Chissale H, Mosse Lázaro C, Cumba L, Temmerman M. Can integrated mother-and-child health care improve follow-up of HIV-exposed infants? Poster presentation, XVII International AIDS Conference, Vienna, July 18-23 2010.



5. Human Resources

Conducting a state-of-the art HRM policy is far from easy given the strict regulations imposed by Ghent University and given 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;
- the introduction of evaluation and functioning talks for every staff member.

List of Employees in 2010

John-Paul Bogers*	Visiting Professor	Els Leye	Senior Project Coordinator & Senior Researcher & Team Leader GBV
Marleen Bosmans**	Senior Project Coordinator	Stanley Luchters	Visiting Professor
Steven Callens	Senior Researcher	Sabine Mall*	Volunteer Kenya
Matthew Chersich	Visiting Professor	Kristien Michiels	PhD Fellow
Bart Craeye**	Researcher	Katherine Muylaert*	Administrative Project Manager
Martine De Backer	Volunteer	Marlise Richter	PhD Fellow
Carla De Beule	Financial Assistant	Kristien Roelens	Senior Researcher
Jessika Deblonde	PhD Fellow	Alexia Sabbe	PhD Fellow
Peter Decat	Researcher & Team Leader Health Systems	Ellen Taets	Administrator
Olivier Degomme*	Scientific Director	Marleen Temmerman	Director
Ilse Delbaere	Senior Researcher	Inge Tency	PhD Fellow
Wim Delva	Researcher	Dirk Van Braeckel	Director Administration & Finance
Sara Demeyer	Researcher	Davy Vandenbroeck	Senior Researcher
Nathalie Dhont	PhD Fellow	Alexander Van der Biest**	Volunteer
Lou Dierick	Volunteer Kenya	An-Sophie Van Parijs	PhD Fellow
Els Duysburgh	Researcher & Team Leader Maternal Health	Anke Van Vossole	Project Coordinator
Diederike Geelhoed	Volunteer Mozambique	Lucas Verhaegen	Researcher
Laurence Hendrickx	Permanent Expert	Rita Verhelst*	Senior Researcher
Ines Keygnaert	PhD Fellow	Heleen Vermandere*	PhD Fellow
Yves Lafort	Senior Project Coordinator & Team Leader HIV/STI	Bavo Verpoest*	Volunteer
		Wei-Hong Zhang	Senior Researcher & Senior Project Coordinator

* Joined ICRH in the course of 2010 or in the beginning of 2011

** Left ICRH in the course of 2010



6. 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.

7.1 Transportation

Commuting

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

Compensation of CO2 emissions



ICRH is involved in many international research projects and as a consequence ICRH staff has to travel frequently within Europe and to other continents. Of course we try to avoid as much as possible unnecessary flights, but even then there are still many flights left. Since July 2009, ICRH compensates the carbon emissions linked to its air miles through the specialized NGO

Compenco2. By doing so, we finance carbon emissions reduction in developing countries, up to the same volume of emissions that we have caused.

7.2 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, but the poor insulation of the building is probably leading to relatively high consumption. On the short term, the only way to tackle this is 'good housekeeping measures', such as switching off the lights and turning down the heating whenever possible. On the mid-term, ICRH is planning a move to a more modern and more energy efficient housing.

7.3 Waste production

ICRH produces almost exclusively office waste, such as paper and ink cartridges. In September 2010, ICRH has leased a new copier/scanner. Standard settings of the printer include black & white and recto/verso printing. Banner sheets are disabled. One-side printed paper is re-used in a special tray of the printer. ICRH is also gradually shifting towards electronic storage of documents as an alternative for printing and classifying paper copies. From 2009 on, ICRH is monitoring its paper consumption. The comparison between 2009 and 2010 is as follows:

	Oct. 2008-Sept 2009 *	Oct. 2009-Sept 2010	Difference
Black and white prints and copies	185,989	140,495	
Colour prints and copies	-	25,543	
Total	185,989	166,038	-10.3%

This result is quite encouraging, especially considering the growth of ICRH in the course of the year. However, there is still room for improvement and we will continue to make attempts to bring down our paper consumption, among others by increasingly archiving scanned documents as opposed to hard copies.



7. 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 2010, ICRH Global focused on setting up its structures, complying with regulatory administrative obligations and exchanging information. A project proposal concerning maternity waiting homes in Mozambique has been successfully submitted to the National Lottery Fund. The project will start in 2011.

Contact: ICRH Global, Ghent University Hospital, De Pintelaan 185, P3, 9000 Ghent, Belgium.

ICRH Kenya

2010 was an important year for ICRH Kenya. The decennial celebrations were overshadowed by quite a few challenges. Leadership: Country Director Dr. Marcel Reyners left for retirement in January 2010 and Research Director Dr. Fiona Mbai left ICRH-K in April 2010. Prof. Walter Jaoko conveniently agreed to take up the position of Acting Country Director and work closely together with the management team consisting of Nzioki Kingola (Director Interventions) and Lou Dierick (Director Support Services). By October, Dr. Sabine Mall was recruited by the Board as new Director of Science and Research, bringing a new dynamic presence to the Management Team. On the projects side, we found that the pipeline of project proposals was getting pretty empty with no new approved proposals. Worse, the Dapivirine project from IPM was cancelled by IPM right before the study was initiated, and the Dutch funding for the PASER studies was cut abruptly by the end of the year. A highlight was the start of the Biomarkers study, a multi-site study coordinated entirely from Mombasa. Also the alcohol study took off in 2010. But at the end of the year we received a major blow when the FHI consortium lost the bid for a continuation of the APHIA program in coast. The Impact and APHIA II projects had been the mainstay of ICRHK activity for the past 10 years. On the financial side 2009 had severely drained the financial reserves of the NGO, and unfortunately measures had to be taken to restore stability, including the first lay-offs in ICRH's history. Nevertheless, the ICRHK family celebrated the closure for the Christmas break in a traditional 'fun-day' fashion.



Photo credit: ICRH Kenya

ICRH Mozambique

ICRH Mozambique was formally established at the end of 2009 as an autonomous NGO, the articles of association were published in the Boletim Da República of February 26, 2010. The organization was officially presented to the public and the press in September 2010, in Maputo in the presence of Dra Guebuza, the First Lady of Mozambique, together with several members of the government. In the course of 2010, ICRH Mozambique has gradually developed its organizational and logistic structure and has invested a lot of effort in submitting project proposals in order to achieve a sufficient critical mass in terms of project portfolio and funding to secure its future as an independent organization. These efforts turn out to have been quite successful: a large WHO-funded project on maternal health started up at the end of 2010, a grant from UNICEF was obtained in the beginning of 2011, a principles agreement on funding for a public-private partnership project aimed at the construction and management of two night clinics has been concluded, and several promising project prospects are in the pipeline. In addition, ICRH Mozambique is a partner in quite some of the international project proposals that have been – or will be - submitted by ICRH Belgium.

ICRH Mozambique has currently two offices: one in Tete and one in Maputo. The Tete office is manned by project staff, and for the Maputo office, an office administrator is already in function and a recruitment procedure for a country coordinator is ongoing.



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Bank: Fortis Bank
SWIFTCODE: GEBA BE BB
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List of abbreviations

AIDS	Acquired Immune Deficiency Syndrome	LSHTM	London School of Hygiene & Tropical Medicine
AMC	Academisch Medisch Centrum (University of Amsterdam)	MARP	Most-At-Risk Populations
ANC	Antenatal Care	MDG	Millennium Development Goals
AOR	Adjusted Odds Ratio	m-DOT	modified-Directly Observed Therapy
ARL	AIDS Reference Laboratory	MITU	Mwanza Intervention Trials Unit
ART	AntiRetroviral Therapy	MOSAFIC	Modelo de Salud Familiar y Comunitaria
ASRH	Adolescent Sexual and Reproductive Health	MRC-CTU	Medical Research Council - Clinical Trials Unit
AZ	Academisch Ziekenhuis (academic hospital)	MSM	Men having Sex with Men
BIDENS	Belgium, Iceland, Norway, Denmark, Estonia and Sweden	MTCT	Mother-To-Child Transmission
BREACH	Belgian AIDS and HIV Research Consortium	MYSA	Mathare Youth Sport Association
BV	Bacterial Vaginosis	NGO	Non-governmental organization
CA	chromID Strepto B agar	NIMR	National Institute for Medical Research
CD4	Cluster of Differentiation 4	NRF	National Research Foundation
CDC	Centers for Disease Control and Prevention	NTNU	Norwegian University of Science and Technology Faculty of Medicine
CERCA	Community Embedded Reproductive Health Care for Adolescents	OLV	Onze Lieve Vrouw Ziekenhuis (Hospital Aalst)
CHIMACA	China Maternal Health Care	PAC	Post-Abortion Contraception
CHUK	Centre Hospitalier Universitaire de Kigali	PAF	Population Attributable Fraction
CHW	Community health workers	PAFP	Post Abortion Family Planning services
CIN2	Cervical intraepithelial neoplasia Phase 2	PASER	PharmAccess African Studies to Evaluate Resistance
CNA	Colistin and Naladixic Acid	PCR	Polymerase Chain Reaction
CPDP	Center for poverty-related communicable diseases	PMTCT	Prevention of Mother to Child Transmission
CRF	Circulating Recombinant Form	QUALMAT	Quality of Maternal and Prenatal Care: Bridging the Know-Do Gap
Danida	Danish Ministry of foreign Affairs	RHRU	Reproductive Health and HIV Research Unit
DBS	Dried Blood Spots	RNA	Ribonucleic acid
DNA	Desoxyribo Nucleic Acid	RTI	Reproductive Tract Infections
DOVE	Domestic Violence Against Women/men in Europe	SACEMA	South African Centre for Epidemiological Modelling and Analysis
DRC	Democratic Republic Congo	SD	Standard deviation
DV	Domestic Violence	SED	sexually enhanced disease
ECHO	European Commission Humanitarian Aid Office	SGBV	Sexual and Gender Based Violence
EDCTP	European and Developing Countries Clinical Trials Partnership	SLPI	Secretory Leukocyte Protease Inhibitor
EMA	European Medicines Agency	SRHR	Sexual and Reproductive Health and Rights
ESA	East and Southern Africa	SSA	Sub-Saharan Africa
ESC	European Society of Contraception and Reproductive Health	STD	Sexually transmitted disease
EU	European Union	STI	Sexually Transmitted Infections
FGD	Focus Group Discussions	SWEAT	Sex Workers Education and Advocacy Taskforce
FGM	Female Genital Mutilation	TB	Tuberculosis
FIFA	Fédération Internationale de Football Association	TcP	Treatment-centred Prevention
FOHCUS	Focal Point on Harmful Cultural Practices	UEM	University Eduardo Mondlane
FSW	Female Sex Workers	UNFPA	United Nations Populations Fund
FWO	Fonds Wetenschappelijk Onderzoek	UNHCR	United Nations High Commissioner for Refugees
GBS	Group B streptococcus	UNICEF	United Nations Children's Fund
GBSDA	Group B Streptococcus Differential Agar	USAID	United States Agency for International Development
HAART	Highly Active Antiretroviral Therapy	UZA	Universitair Ziekenhuis Antwerpen (University Hospital Antwerp)
HCP	Harmful Cultural Practices	VLIR	Vlaamse Interuniversitaire Raad (Flemish Interuniversity Council)
HIV	Human Immunodeficiency Virus	VLIR-UOS	Vlaamse Interuniversitaire Raad - University Development Cooperation
HPV	Human Papilloma Virus	VUB	Vrije Universiteit Brussel
HSV	Herpes simplex virus	WHI	Women's Health Initiative
ICDP	International Conference on Population and Development	WHO	World Health Organisation
ICRH	International Centre of Reproductive Health		
IGVM	Instituut voor Gelijkheid van Mannen en Vrouwen (Institute for the Equality of Women and Men)		
IPM	International Partnership for Microbicides		
IQR	Inter-Quartile Range		
ISPOR	International Society For Pharmacoeconomics and Outcomes Research		
IUC	Institutional University Cooperation		
IWT	Institute for Innovation through Science and Technology		
LDD	Long-Distance truck Drivers		



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