

AIDS 2010 Day 3

Nicole Gooch, Secretariat of the Pacific Community

As happens at every International AIDS Conference, the streets of Vienna were alive with the vibrant traditional costumes and music of AIDS 2010 participants from all over the world.

Just as much of a ritual are the protest marches through the main streets of the city. This year, with countries struggling to recover from the global financial crisis, protests were focused on diminishing funding and, as one banner spelt out, the fear that leaders will 'retreat from their promises'.

Dr Julio Montaner, AIDS 2010 Chairperson, expressed similar sentiments in his opening remarks. 'We are at a pivotal moment in the global response to AIDS and there is both a moral and a public health imperative that we continue in the right direction,' said Dr. Montaner. 'Increased financial commitments must be matched with a drive for the most efficient use of resources.'

Efficiency was also an important theme of a Sunday town hall meeting on a new paradigm for HIV treatment and prevention.

At the meeting, UNAIDS launched Treatment 2.0, a strategy aimed at developing better combination treatment regimens, cheaper and simpler diagnostic tools, and a low-cost, community-led approach to delivery.

'AIDS 2010 participants have come to Vienna from more than 185 countries, something that would have been impossible 100 years ago,' said Dr Brigitte Schmied, AIDS 2010 Local Co-Chair. 'As our



International AIDS Conference, ©IAS/Marcus Rose/Workers' Photos

world becomes smaller, let us try to remember that the goal of universal access (...), as well as global health is ultimately about communities, about families and about individuals.'

'It's the mother who must leave her newborn in hospital because she has no capacity to care for her child due to the lack of social support. It's the person who injects drugs and is harassed or even beaten while trying to pick up clean needles and syringes to protect himself and his partner from infection. And, tragically, it's the child suffering from AIDS because his parents deny the existence of HIV.'

Dr Dennie Iniakwala, head of the HIV & STI Section at the Secretariat of the Pacific Community (SPC), said

'These examples may come from a conference in Vienna thousands of kilometers away. But they are either already happening or will soon become a reality in the Pacific, unless every individual in every community takes personal responsibility for preventing HIV infection and supporting people living with HIV.'

Dr Julio Montaner also stressed that 'Stigmatisation and discrimination result in misguided policies and misallocated resources, as many governments are averse to implementing scientifically sound programmes for at-risk groups, such as (...) sex trade workers and men who have sex with men. Gender discrimination contributes to heightened vulnerability to HIV among women and girls.'

Roll-out of new HIV testing strategy

Alan Garvez, Secretariat of the Pacific Community

A number of Pacific Island countries and territories (PICTs) will no longer face the challenge of sending blood specimens for HIV confirmatory testing. The Pacific HIV Testing Task Force has recently released a recommended HIV testing algorithm that will be rolled out in 12 PICTs. The recommended HIV testing strategy uses three rapid tests done in a serial-parallel approach: a reactive screening test is confirmed using two further rapid tests done in parallel.

Currently, PICTs use Inverness Determine® HIV 1/2 as the screening test, and blood specimens are sent to overseas referral laboratories to confirm a reactive screening test. Either a Western blot technique or two ELISA (enzyme-linked immunosorbent assay) tests are done for HIV confirmatory testing. Most PICTs do not have the capacity to perform in-country HIV confirmatory testing because the tests are expensive and require highly skilled staff, and the equipment is expensive to maintain. Also, the low volume of tests to be done due to the low prevalence of HIV in the region does not justify doing in-country HIV confirmatory testing with the current strategy. Often, there is significant delay in the turnaround time for HIV confirmatory test results, and as a consequence patients do not receive timely and appropriate care. In particular, there have been reports of mother-to-child transmission of HIV in one country because of the delayed turnaround time for HIV confirmatory test results.

The issues faced by PICTs with regard to HIV testing were addressed in the Regional Level Technical Consultation on HIV Testing in

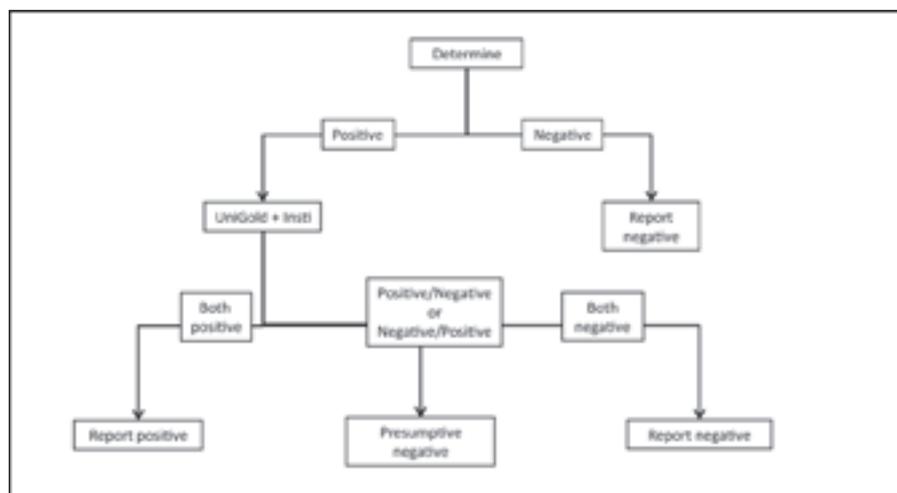


Figure 1: Recommended in-country HIV testing algorithm.

the Pacific held on 5–6 May 2008 in Pago Pago, American Samoa. The meeting recommended a harmonised approach to standardise and improve the quality, consistency and turnaround time for HIV testing services. It also recommended using HIV rapid tests for HIV diagnosis in the region and for the Secretariat of the Pacific Community (SPC) to convene a task force. The task force has conducted a number of teleconferences with partners since 2008 in order to oversee the HIV testing validation project in the region.

SPC contracted the National Reference Laboratory (NRL) in Melbourne, Australia to evaluate five HIV rapid tests that can potentially be used to confirm a reactive Inverness Determine® HIV 1/2 screening test. Blood samples that were collected from the region were used to validate the five HIV rapid tests. This was Phase I of the HIV testing validation project, and two out of the five HIV rapid tests (Trinity Biotech Uni-Gold™ Recombigen HIV® and Biolytical Insti™ HIV-1/HIV-2) assessed

were selected to confirm a reactive screening test.

The initial plan was to roll out the recommended HIV testing algorithm (Phase II) in four PICTs (Fiji, Kiribati, Solomon Islands and Vanuatu) before its full implementation in the region (Phase III). However, the task force regarded it as a matter of urgency to roll out the recommended HIV testing algorithm as soon as possible because of the challenges faced by PICTs, and in May 2010 decided to combine phases II and III of the HIV testing validation project.

How reliable and accurate is the recommended HIV testing algorithm? Based on the Phase I study of the HIV testing validation project, the sensitivity is 99.24%; specificity 100%, positive predictive value 100%; and negative predictive value 99.82%. A schema of the HIV testing algorithm is shown in Figure 1.

The interpretation of the test results using the recommended HIV testing algorithm and the follow-up action are outlined in Figure 2.

Test result			Report	Comment
Determine	Uni-Gold	Insti		
Negative	Test not required	Test not required	Anti-HIV negative	HIV antibody not detected.
Positive	Negative	Negative	Anti-HIV negative	HIV antibody not present, false positive screen. Refer to NRL for quality assurance.
Positive	Positive	Negative	Presumptive negative	Most likely HIV negative. There is a small possibility that these may indicate early HIV infection. Refer to NRL for quality assurance and confirmatory testing. It is strongly recommended that another blood sample be drawn in 4–6 weeks for testing to confirm these results.
Positive	Negative	Positive		
Positive	Positive	Positive	Anti-HIV positive	Reactivity in HIV tests indicate HIV infection. Refer to NRL for quality assurance purposes. Should NRL result differ, a second blood sample should be drawn as soon as possible for further testing at NRL.

Figure 2: Interpretation of test results using recommended in-country HIV testing algorithm.

During the roll-out of the recommended HIV testing algorithm, blood samples will be sent to NRL regularly for quality assurance. This will also make the recommended HIV testing algorithm more robust as more data on the accuracy of the testing strategy are collected.

For more information, please contact Alan Garvez, HIV Treatment and Care Adviser, SPC, email: AlanG@spc.int

New CD4 testing technology introduced in PICTs

Alan Garvez, Secretariat of the Pacific Community

CD4 cell count or CD4 testing is the best marker for the initiation of life-saving antiretroviral therapy (ART) in people living with HIV (PLHIV).

Initiating ART on the basis of the World Health Organization (WHO) clinical staging is far less sensitive than initiating ART on the basis of the CD4 count and frequently results in inappropriately delayed initiation of therapy. Clinical staging becomes even less sensitive given the latest WHO recommendation (2010) to commence treatment at CD4 count less than or equal to 350 cells/mm³. For these reasons, reliable CD4 testing is essential for the health and wellbeing of PLHIV.

Reliable CD4 testing is not currently available in Pacific Island countries



At the hospital laboratory Kiribati

and territories (PICTs). In the past, efforts have been made to implement manual CD4 enumeration using the Dynal T4 Quant system. To date, great difficulty has been experienced by

laboratory technicians in the region in obtaining reliable results with the Dynal T4 Quant system. The method is labour intensive and requires many manual steps, keen attention to



Training of Health Care Professionals, Tungaru Central Hospital, Bikinebeu, Tarawa, Kiribati

Aside from its performance profile, SPC's analysis showed that the Pima CD4 Analyzer has low human resource needs, no service and maintenance needs, low capital cost, and low cost per test.

detail and regular operator practice. Because of the low prevalence of HIV in the region, laboratory technicians suffer from skills attrition and there are often large intra- and inter-operator variations in the results obtained. Moreover, laboratory technicians feel that there is greater frequency of occupational exposure to manual methods of CD4 testing.

Faced with these realities, the HIV & STI Section in the Public Health Division (PHD) of the Secretariat of the Pacific Community (SPC) has explored a number of CD4 testing options for the region. Developing in-country flow cytometry (the 'gold standard') capacity was considered, but this option requires skills that are difficult to maintain due to the low volume of patients in the region. Also, the machine is expensive and maintenance is problematic with the unpredictable power supply in some PICTs.

One option to access flow cytometry is to refer specimens to overseas laboratories from PICTs. While this option is attractive in terms of

gaining access to the highest-quality laboratories, it needs to be balanced not only with the associated costs but also with the associated logistical issues – samples have to be analysed quickly (usually within 48 hours) to obtain accurate CD4 counts.

Lately, newer, relatively inexpensive and simple technologies that could potentially offer solutions for CD4 testing in the region have been considered. The Pima CD4 Analyzer and the associated Pima CD4 cartridge from Inverness Medical were evaluated by SPC in collaboration with Institut Pasteur in New Caledonia as to their ease of use and suitability for PICTs. The Institut Pasteur's recommendation is that the device is appropriate and suitable for use in resource-limited settings, including central laboratories in PICTs. The Pima CD4 Analyzer was also evaluated by the Centers for Disease Control (CDC), USA and the National Health Laboratory Services, South Africa. Both institutions concluded that it has excellent performance compared with the gold standard.

Aside from its performance profile, SPC's analysis showed that the Pima CD4 Analyzer has low human resource needs, no service and maintenance needs, low capital cost, and low cost per test.

The Pima CD4 Analyzer employs the same static image analysis and counting principles as existing CD4 enumeration technology. On the other hand, the associated Pima CD4 cartridge contains all the test reagents sealed within the disposable cartridge and requires only 25µL of blood, and CD4 test results are available in 20 minutes. The whole test requires few steps and the results can be printed readily and stored electronically.

It is envisioned that the introduction of the Pima CD4 Analyzer in PICTs will improve HIV care and early initiation of ART in the region.

For more information, please contact Alan Garvez, HIV Treatment and Care Adviser, SPC, email: AlanG@spc.int

New report – Risky business Kiribati: HIV prevention among women who board foreign fishing vessels to sell sex

Karen McMillan and Heather Worth, International HIV Research Group, UNSW

Fishing and the maritime industry are central to everyday life in the Republic of Kiribati and to the Republic's formal and informal economies. In consideration of Kiribati's vulnerability to HIV, seafarers are always, understandably, a central concern.

The issue of I-Kiribati women who board foreign fishing vessels for sex work, known as 'ainen matawa', also regularly appears in documents and papers that are considering HIV prevention strategies for Kiribati.

Although there have, to date, been no diagnoses of HIV from this group, the position of such women as potential vectors of transmission of the virus to the general population of Kiribati tends to be given more prominence than the women's own specific vulnerabilities.

Sex workers have long been blamed for HIV among seafarers in the Pacific. In 1998, one *Pacific AIDS Alert* article stated, without evidence, that 'there appear[ed] to be widespread HIV infection among the seafaring community throughout the Pacific and this [was] usually from young women working as casual sex workers'.

Risky business Kiribati documents the findings of a qualitative investigation into the context of HIV vulnerability and risk for women who engage in sex work on board foreign boats. The research aims to



The women are generally not paid for each sexual encounter; even if short-lived, the relationships are exclusive rather than concurrent; and the relationships are frequently characterised by bonds of emotional intimacy and trust.

inform HIV prevention strategies and programmes for this group, and is based on fieldwork carried out between February and August 2010 in Tarawa, Kiribati.

In-depth interview data were gathered from 25 young women in South Tarawa who talked about their lives with a specific focus on their experiences and sexual relationships with foreign seafarers on board fishing vessels.

The research contributes to a larger regional project investigating sex work, HIV prevention and transmission risk behaviour in the Pacific that is currently being undertaken by the International HIV Research Group of the University of New South Wales.

Key findings

The sexual relationships and commerce between *ainen matawa* and their foreign seafarer clients



Despite these qualities of intimacy, trust and temporary exclusivity, with respect to HIV and other STIs the relationships may simply generate greater vulnerabilities and risks to these women compared to regular I-Kiribati wives and girlfriends of seafarers.

differ from those that usually typify sex work in various important ways. For example, the women are generally not paid for each sexual encounter; even if short-lived, the relationships are exclusive rather than concurrent; and the relationships are frequently characterised by bonds of emotional intimacy and trust.

Despite these qualities of intimacy, trust and temporary exclusivity, with respect to HIV and other STIs the relationships may simply generate greater vulnerabilities and risks to these women compared to regular I-Kiribati wives and girlfriends of seafarers.

This is primarily because *ainen matawa* tend to have multiple sequential seafarer partners.

Furthermore, their very identity as *ainen matawa* renders them vulnerable to rape and sexual abuse from certain seafarers and from local men, including the police.

In addition, experiences of marginalisation and fear of discrimination and stigmatisation often deter *ainen matawa* from using HIV and STI testing and treatment services.

Beyond ensuring access to condoms and sexual health services, HIV prevention and risk reduction activities will need to be developed with the concerns and motivations of *ainen matawa* firmly in mind. For example, simple 'no glove, no love' messages and the usual client negotiation skills workshops

developed for typical sex workers will have limited efficacy.

While the risk that *ainen matawa* pose to the rest of the I-Kiribati population as potential vectors of HIV appears to be frequently overstated, their own risk of exposure to HIV from seafarer partners cannot be discounted. In particular, it will be important not to exacerbate the vulnerabilities of these young women, who are exploring limited options, by demonising them.

For more information, please contact Associate Professor Heather Worth, Director, International HIV Research Group, School of Public Health and Community Medicine, University of New South Wales (UNSW), email: h.worth@unsw.edu.au

Reproductive health options and choices for women living with HIV

Hilary Gorman, Pacific Islands AIDS Foundation

Summary of poster presentation: Motherhood, reproduction and treatment in the Pacific

In the Pacific, as for the majority of the world, motherhood is viewed as an integral social and cultural role for women. For HIV-positive women, with improvements in access to treatment, the chances of having HIV-positive babies are declining. Yet social acceptance of childbearing among HIV-positive women is not widespread and, in some Pacific contexts, resources such as quality care and antiretroviral treatment are limited.

This study found that many HIV-positive women wanted to have children, yet they also had concerns related to their HIV status. They were concerned about finding a partner to have a child with, about being able to take care of their children, and especially that their child might also be HIV-positive. Other women who were already mothers expressed anxiety about being able to continue to fulfil their role as mothers. They also noted the difficulties they faced in dealing with HIV-related health issues and the stress they felt because of their status. Some women had positive experiences while receiving treatment to prevent mother-to-child-transmission (PMTCT) of HIV, whereas others encountered stigma and discrimination from health-care workers. The women's narratives indicate that treatment to PMTCT serves mainly to prevent the transmission of HIV to the child; in general it does not fulfil the rights of HIV-positive women.

The women who participated in this study articulated that they face confusion, misinformation and discrimination in their reproductive choices as women living with HIV. Several studies in other resource-limited settings have similarly found that other HIV-positive women face the predicament of wanting to fulfil the role of motherhood while living with HIV. As treatment to PMTCT expands and improves throughout the Pacific there is a strong need to integrate the reproductive rights of HIV-positive women into health services for people living with HIV. Counsellors and health-care workers ought to be provided with training so that they are prepared to discuss HIV-positive women's reproductive options and choices.

The topics of childbearing among HIV-positive women and the broader issues of reproductive rights for people living with HIV were widely discussed at the International AIDS Conference in Vienna, Austria. There I also presented a poster entitled 'Motherhood, reproduction and treatment: A qualitative study of the experiences of HIV-positive women in the Pacific'. The presentation was based on a larger study undertaken by the Pacific Islands AIDS Foundation (PIAF), which qualitatively explores the experiences of HIV-positive women



Hilary Gorman in Vienna with a participant from South Africa

in Fiji Islands and Papua New Guinea.

Attending the International AIDS Conference provided an opportunity to take part in sessions that focused on reproductive health and rights of people living with HIV. During the sessions presenters outlined how HIV-positive women in the United States, Uganda, Germany, Mexico, Kenya and Indonesia are often given limited or no options when it comes to their reproductive health and rights. Overall the key challenges identified were weak health systems and especially social and cultural issues. As social and cultural issues were discussed, HIV-positive women

activists from various regions described how women living with HIV are often made to feel guilty for becoming pregnant; they are also discouraged from having children and at times are forced through sterilisation to give up on this option.

From the discussions, it became clear that although it is a challenge in resource-limited settings, counselling on reproductive health and childbearing should be incorporated into HIV service programmes. Without this component, the notion of reproductive health and rights for people living with HIV exists only as an idea. At the same time, the social and cultural issues need to be

addressed so that social acceptance of HIV-positive women and men having children grows. PIAF's soon-to-be-released report, which documents the experiences of several Pacific women living with HIV, will shed further light on these issues and how they can be addressed in the Pacific context.

*For more information, please contact:
Hilary Gorman, Research Officer
Pacific Islands AIDS Foundation,
PO Box 888
Rarotonga, Cook Islands
Phone: +682 23102,
<http://www.pacificaids.org>
Email: research@pacificaids.org*

The gender equality issue in HIV and AIDS

Tessa Walsh, UNIFEM

In Papua New Guinea there are more women than men living with HIV. In 2008, of the reported cases of HIV for which gender is recorded, 51.6 per cent were women and 44 per cent were men (Commission on AIDS in the Pacific 2009, p 22). In addition, the proportion of women living with HIV continues to increase. In 2005 and 2007, 60 per cent of all HIV notifications in Papua New Guinea were for women.

Women and girls often have less information about HIV and fewer resources to take preventive measures than men do. They face barriers to the negotiation of safer sex, including economic dependency, gender-based violence and unequal power relations.

Women also generally assume the

While positive men are cared for by their partners, mothers, sisters and daughters, women who are either widowed by AIDS or who are positive themselves are often isolated and excluded.

responsibility of home-based care for those who are sick or dying as a result of HIV, along with the orphans left behind. Girls (rather than their brothers) are often taken out of school to care for family members who are HIV-positive. While positive men are cared for by their partners, mothers, sisters and daughters, women who are

either widowed by AIDS or who are positive themselves are often isolated and excluded. In many situations they have no property rights and are thrown out of their home or told to return to their village.

In many cases, too, positive women face stigma and exclusion, which is