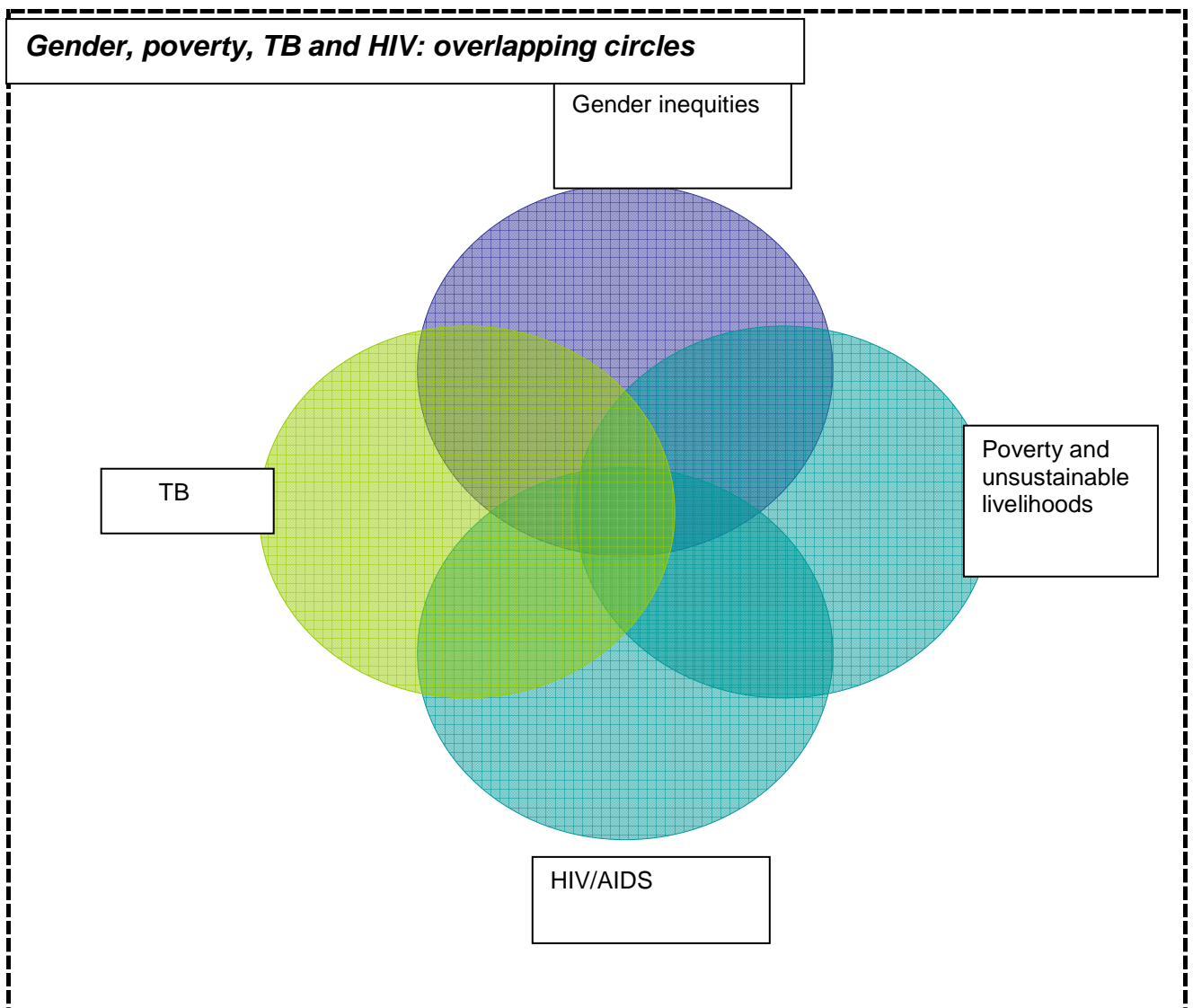


RESULTS symposium on TB and HIV.
London School of Hygiene and Tropical Medicine, 29th June 2005.

Gender, Poverty, TB and HIV/AIDS in Africa: Some Causes and Consequences

	<p>International Community of Women living with HIV/AIDS</p> <p>Patron: Mary Robinson</p> <p>www.icw.org</p>
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Dr Alice Welbourn, Chair, the International Community of Women living with HIV/AIDS.



The drawing above of four overlapping circles serves to illustrate my presentation this evening, in an attempt to describe how we at ICW see the combined causes and consequences of these four factors in relation to women with HIV.

I am going to talk least about poverty, because the dimensions of poverty in relation to TB and to HIV have already been clearly described by Dr Felix Salaniponi (the National TB Programme Manager of Malawi), the previous speaker, and because links between poverty and ill health in general are perhaps the issues which are most familiar to everyone here tonight.

Instead, therefore my presentation is going to focus on the other 3 circles of this diagram. I will look at each in turn. Let's begin first with HIV.

HIV: Global Facts 2005

***Some facts (UNAIDS):
Estimated....***

Numbers of HIV positive people.....	40 million
Total all new HIV infections.....	ca 5 million
Botswana now has a life expectancy of	27 years
<i>Some parts of Zambia are now treeless</i>	
Total AIDS-related deaths	Ca 3.1 million

In addition to those facts, let us look at some more, also from UNAIDS:

HIV: Global Facts 2005

Some more facts (UNAIDS):

- 1) *Marriage* is now a risk factor for HIV for women in many parts of sub-Saharan Africa**
- 2) Total new HIV positive women daily..... 7,000**
- 3) Ca. 60% of HIV positive people in sub-Saharan Africa are..... women**
- 4) *Most new infections* are..... young women**

It is often hard for us sitting here in the UK to take on board the enormity of these facts in these two tables. So here are some of the same figures again, compared to the Boxing Day Tsunami:

HIV: Global Figures

***26 Dec 04 – 09 Feb 05:
(after 45 days)***

Estimated....

Total deaths from Tsunami	295,608
Total new HIV positive women	315,000
Total all new HIV infections	604,000
Total AIDS-related deaths	382,191

And here are those same figures again, also compared to the Tsunami:

HIV Global Figures

All of 2005:

Estimated....

Total deaths from Tsunami	295,608
Total all new HIV infections	x 16
Total AIDS-related deaths	x 10

I have kept checking and re-checking these comparison figures, hoping that somehow I have got my maths wrong. But others have checked them for me and have come out with the same figures. This is the enormity of the HIV pandemic with which we are now dealing.

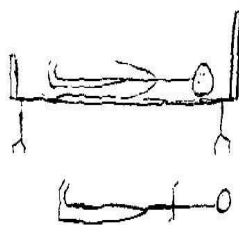
So much for HIV. What about gender? Well it's not just ICW that recognizes the links between sex and gender. DFID too, in a presentation made in the House of Commons, reported in Hansard, made these links clear also.

Gender

"In all societies, gender is important in determining what women and men are expected to know about sexual matters, how they are expected to behave and their attitudes in relation to sex" (DFID report: Hansard, 2001)

This means that in talking about HIV, it is imperative to talk about gender inequalities also, and not to do so is just missing out on a crucial aspect of what fuels and fans this pandemic.

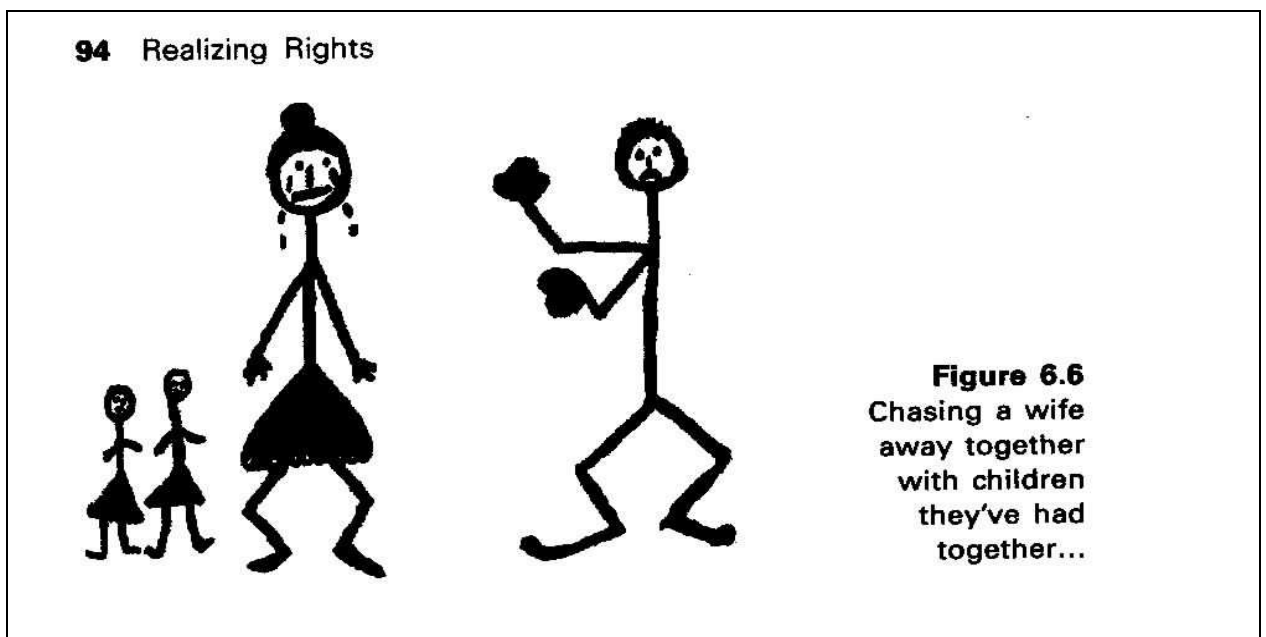
Of course there was gender inequity for millennia before HIV appeared, as this example from Zambia illustrates clearly:



"When we are tired and refuse to have sex with our husbands, we are told to sleep on the floor, under the bed"

Older women's group, Zambia

CAFOD: “Safely through the Night” (**Realizing Rights**, 2002, Zed Press)
 Here below is another example, also from work in Zambia, this time by YWCA, of the links between sex, gender and gender violence. This diagram also highlights the effects of gender violence not just on the individuals concerned, but on the whole family, children included. It is important to point out that, although these two illustrations happen to be from Zambia, gender violence is a global phenomenon. Here in the UK 2 women a week are killed through domestic violence. It is also clear that children who face childhood trauma of this kind often grow up themselves either to be perpetrators or recipients of violence in their own relationships. So we are talking not just about isolated incidents of gender violence, but life-long patterns of life-cycles of violence, repeated generation after generation – and all this before HIV ever began.

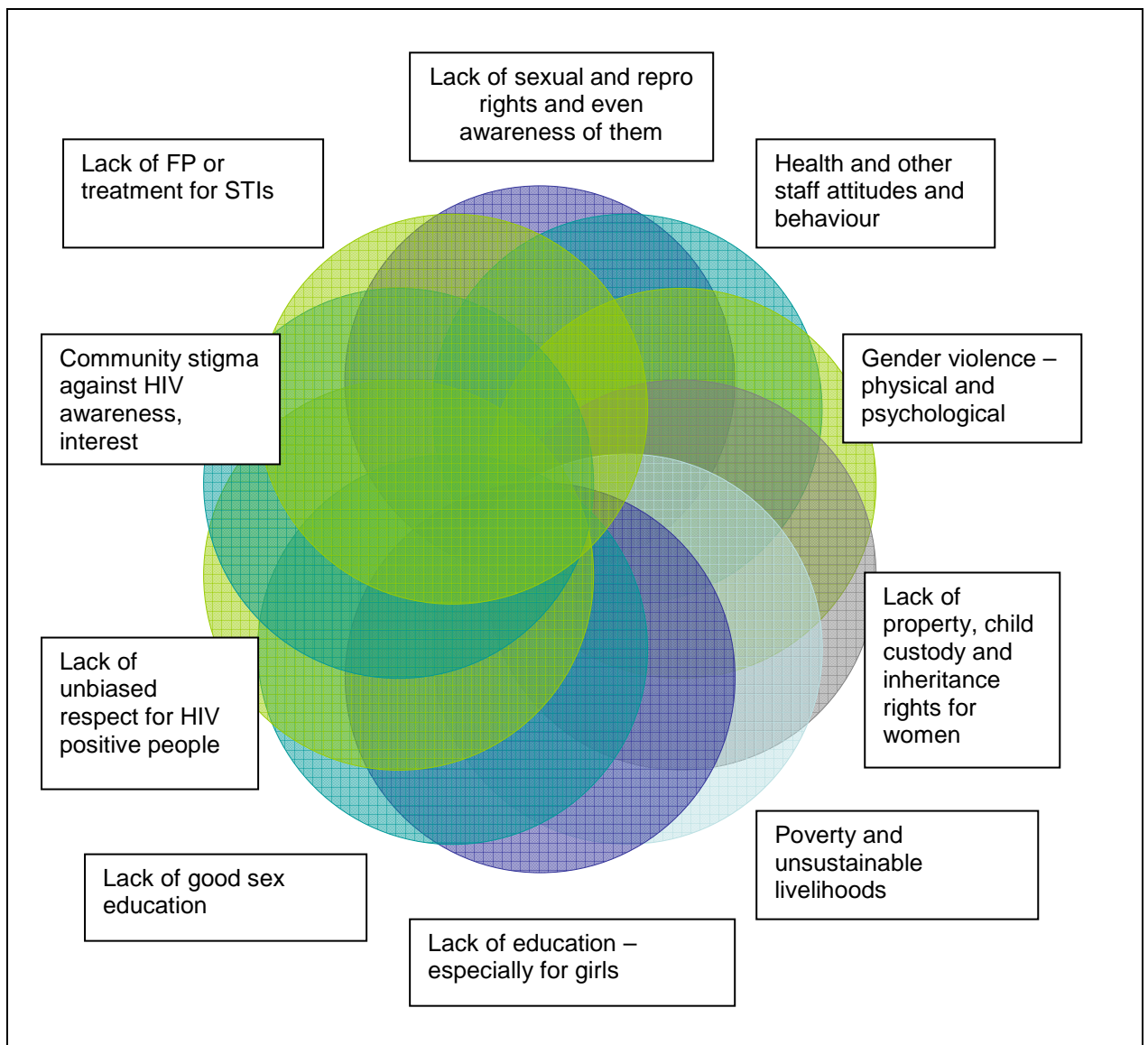


YWCA: “Visual Techniques to Initiate Discussion” (**Realizing Rights**, 2002, Zed Press)

When HIV *did* appear, it was originally commonly supposed that simple “ABC” messages would be all that was needed to protect people from HIV infection – and such messages are still promoted by those who prefer not to look at the evidence. But members of ICW, HIV positive women around the world, now know differently:

**Most of our members in 140 countries of the world never thought themselves to be at risk of HIV.....
and of those that did, most had no power to reduce their risk**

If we begin to look at the factors which have caused our members to acquire HIV, we can begin to realize just how complex a reality we are dealing with. Here below are some more overlapping circles, which highlight some of the main causes of HIV highlighted by our members.



This diagram begins to illustrate how complicated a problem HIV prevention is for so many of our members.

If we turn next to TB and gender issues, we see that many patterns of HIV in relation to women are also connected to TB diagnosis, care and treatment in relation to women.

TB.....Globally evidence suggests:

- poor women experience gender-specific barriers to accessing TB diagnostic and treatment services, which are often greater than those faced by their male counterparts.
- In India, deaths from TB were 27-41% higher amongst young women and children aged 5-24 years compared with males in the same age group. This can be partly explained by delays in seeking care.
- The low status of women, their limited decision making ability and access to

health resources place them at particular disadvantages in comparison to men who have TB.

(Gender and Health Group, Liverpool School of Tropical Medicine; LATH; Liverpool VCT, Reach Trust Lilongwe¹)

There are various different studies which have been conducted, more so far in Asia than in Africa, which back up this general statement. Here are some below:

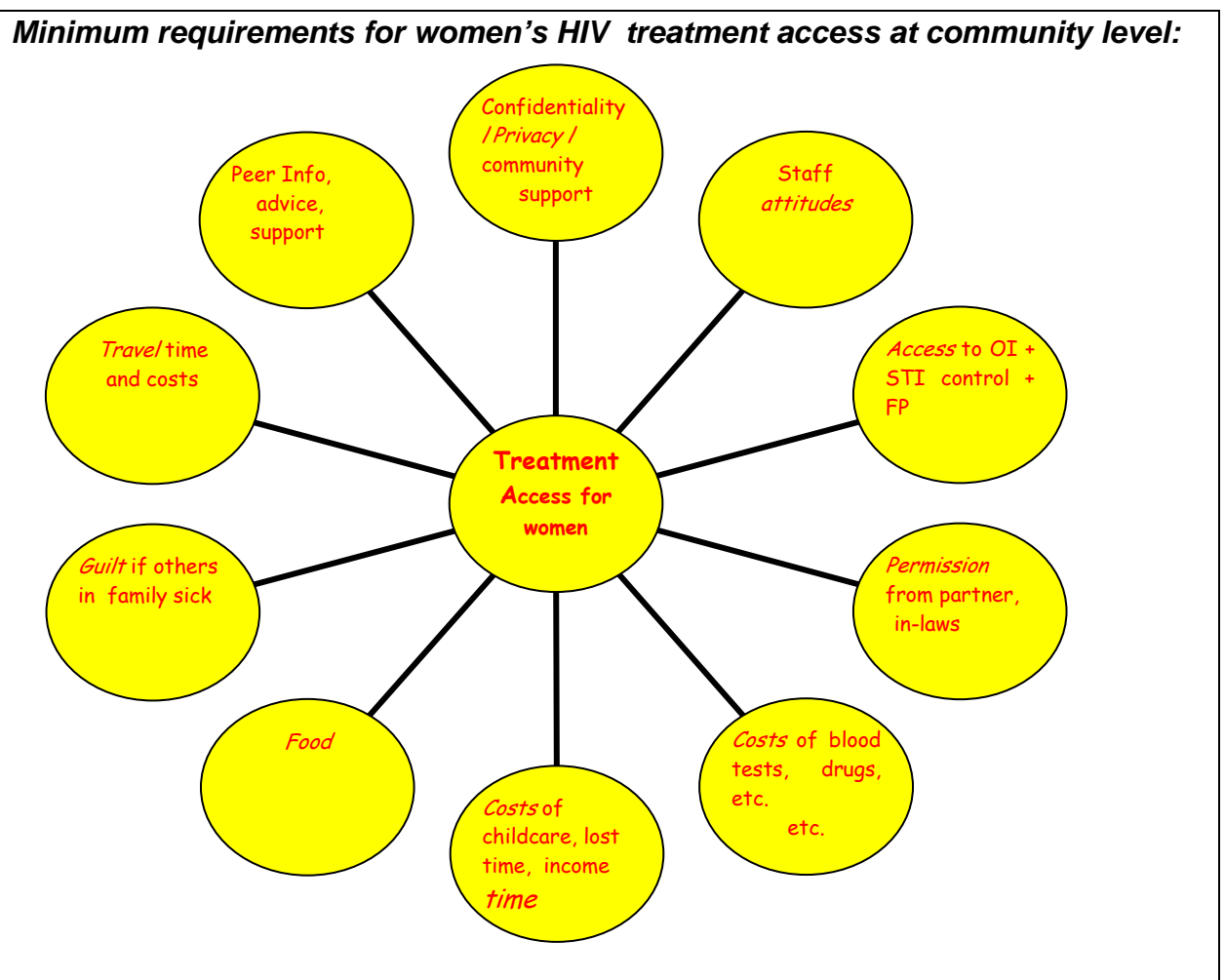
TB....

- In a district of Vietnam another survey suggests that women ran a significant risk of under-detection. Although prevalence was similar for men and women, case detection was 39% amongst men and 12% in women. Under-detection of female tuberculosis patients was explained by stigma and fear of social consequences, which led to women preferring to use private providers or drug sellers, who offered greater privacy as well as being more easily accessible.
- “In Gambia, although cost of transport was a major issue for all participants, more men cited this as a factor influencing their access to tuberculosis treatment. More women recognised stigma as the main issue”
- “Some women do not want to worry their families with their own health problems, or to be a financial burden. In China, women with TB would delay care seeking so as not to use scarce resources on themselves and in Nepal, women with TB were found to wait twice as long as men before seeking treatment.”
- A study in China found that the poor had a lower level of knowledge about the free treatment programme for TB, whilst women in particular were being missed by health promotion programmes and consequently had lower levels of knowledge and awareness of TB symptoms.
- The health system often takes a passive attitude towards those who are unaware of their services or are not accessing them. The Acting National Director of the Zambian National AIDS Council says: *“the drugs are available to both men and women – I don’t know why women are not accessing them.”*

¹ This and other boxes referring to TB and gender are from a paper commissioned jointly by ICW, WHO and UNAIDS: *“Analysis of the gender dimension in the scale-up of antiretroviral therapy and the extent to which free treatment at point of delivery ensures equitable access for women”* draft ms. By Gender and Health Group, Liverpool School of Tropical Medicine Liverpool Associates in Tropical Health Liverpool VCT and Care, Nairobi, Kenya Reach Trust, Lilongwe, Malawi. This paper will be published jointly shortly by ICW and Liverpool School.

This last comment about lack of health officials' awareness of why their services are not accessed by women is widespread and not just limited to Zambia. We have seen from our own ICW members' experiences in relation to HIV, that there is far more similarity of experiences across Asia, L America and Africa than there are differences. I feel fairly confident therefore that the results of these studies from Asia cited above would also be reflected in studies in Africa.

Where does all this leave us then we are looking at joint TB and HIV co-infection amongst women? Well if we look once more at our experiences of our members in relation to HIV diagnosis, care and treatment, we see that we are faced with a plethora of barriers to HIV treatment, which will then also stand in the way of their being treated for TB co-infection.



The interplay between poverty, TB and HIV have immense implications for the spread of TB and the deaths caused by undetected and untreated TB, through TB/HIV co-infection (See Achmat and Roberts, appendix 1). This was made clear by Dr Jim Kim, head of the HIV Department at WHO last week, when he stated that it would almost be more accurate to talk about "HIV/TB" than about "HIV/AIDS". As if this state of affairs is not already bad enough, the added complexities and implications of the

gender inequities involved in TB/HIV coinfection are only just now beginning to emerge.

ICW therefore calls upon WHO, ministries of health and other health service providers around the world, as a matter of the greatest urgency, to take rural women as your benchmark for treatment access for both these conditions.

Keep rural positive women alive as your benchmark.... or.....

- Orphans
- no farmers
- no carers of the sick
- no educators of children
- no communities
- no future

The list above reflects only *some* of the contributions that our members are making to this world, and reflects only *some* of what the world will miss when they have gone.

Without rural women there to conduct these tasks, whole families, neighbourhoods and communities are just collapsing. They are doing what they can, in any way that they can, to support their families, their friends and their communities. We hear constantly stories of extraordinary strength and resilience in the face of unmitigating prejudice, sickness and death. But without the correct diagnoses of the conditions which they have, without the correct drugs to keep them alive and the care and support of the rest of the world to cope with the psychological burdens of both HIV *and* TB, their efforts and commitment to making the world a better place for *their* families and friends are futile.

We believe that if rural HIV positive women have access to diagnosis and treatment, then men and children are likely to be receiving access also – because women have always placed themselves at the back of the queue since time immemorial. Therefore if correct diagnosis and treatment access is truly happening for rural women, then the world's health service providers can feel fairly confident that they are starting to get it right for much of the rest of society also.

Of course rural places can also be very conservative places to live, so treatment access issues for injecting drug users, men who have sex with men, sex workers and others marginalised by society will also need to be addressed carefully. But so long as the principles of an approach which addresses the socio-economic as well as the technical dimensions of treatment access for this virus are followed for *all* who need it, creating services fit for people rather than trying to fit people into services, then effective diagnosis and treatment access for rural women will be one key progress indicator.

To conclude, ladies and gentlemen, I would like to add a few words about ICW, the global network of HIV positive women which I have mentioned a few times this evening.

ICW stands for human *rights* and for social, economic and legal *justice*. We are the only international network run by and for HIV positive women and our purpose is to advocate for the rights of our members around the world. The other day my daughter

was looking at the Universal Declaration of Human Rights, which was drawn up in 1948. As she read it she stared in horror at its contents, and asked “how can it be that we all have all these rights, and yet there is so much injustice, poverty and ill-health in the world?” Why indeed? Here we are nearly 60 years on. Gender, HIV, poverty and TB, ladies and gentlemen, are not “just” health or social issues. They are issues of political will and genuine commitment of funding and resources. When will the members of the G8 meeting next week, and the world’s other leaders really begin to take these facts which I have presented here this evening on board and truly begin to act on them, rather than on rhetoric?

Appendix One: Extract from Zackie Achmat and Reid Austin Roberts:
Steering the Storm: TB and HIV in South Africa. A policy paper of the Treatment Action Campaign Draft Date: June 07, 2005

“Worldwide, over 2 billion people are infected with *M. tuberculosis* [7]. TB kills about two million people a year, with 95% of TB cases and 99% of all deaths in developing countries [8]. Of the estimated 44 million people living with HIV/AIDS, 12 million are coinfecting with TB and over 66% of them live in sub Saharan Africa [9]. An example of the rapid rise of HIV coinfection in TB patients can be found in South Africa's gold mines. According to one study in the Free State Province, the HIV prevalence rose from 15% in 1993 to 45% of all TB patients in 1996 [10]. The number of TB cases in Africa is expected to double over the next decade largely due to the HIV epidemic [11].

The risk of developing active TB in an HIV negative individual is 10% over the course of their lifetime. This risk increases 510 times to 78% per year in HIV positive people [1, 12 13].

A retrospective cohort study of South African gold miners found that TB incidence doubled within the first year of HIV infection, thus supporting the need for widespread HIV testing as a preventive measure against TB [14].

Research also shows that HIV infection during infancy increases the risk of developing TB [15].

There is evidence which indicates that the stage of HIV infection is correlated with increased risk of TB infection. One such study, which followed adult patients attending the University of Cape Town's HIV clinics between 1986 and 1996, revealed that a WHO clinical stage 3 or 4 was the most significant risk factor for TB [16]. This agrees with other data stating the incidence of TB in AIDS patients is 500 times that of the general population and TB likely accounts for nearly 40% of AIDS deaths in the African region [17]. TB is one of the most common opportunistic infection among people living with HIV also associated with death.

Similarly, HIV is one of the strongest risk factors for developing active TB [18]. Studies show that TB recurrence rates are increasing in relation to relapse rates and this is correlated with HIV co infection. One study found recurrence rates in HIV positive individuals at 38% compared to 23% for HIV negative people [19]. Another study looking at South African gold miners found nearly a fourfold increase in TB recurrence rates among HIV positive miners compared to those without HIV [20].

Not only does South Africa have one of the largest numbers of people living with HIV in the world, it has one of the highest incidence rates for TB worldwide (558 per 100,000) [21]. The TB incidence rate has increased dramatically as the HIV epidemic

has worsened, with the number of TB cases more than doubling since 1996 (Tables 1 and 2).

(Table 1: TB Cases in South Africa²)

Source: Department of Health's National TB Control Program 2003 Fact Sheet and Health Systems Trust)

(Table 2: Incidence of TB, all types (per 100 000)

Source: Health Systems Trust)

As the trends in the above data suggest, it should be no surprise that this increase is directly related to the HIV epidemic. In South Africa, more than 55% of patients with smear or culture positive TB are HIV positive [22] and one study in hospitals associated with the University of the Witwatersrand's Department of Paediatrics showed that 42% of children with TB are coinfecting with HIV [23]. In the 15-49 year old age range, 60% of all TB cases are in HIV positive people [21]. TB associated with HIV is the leading cause of death in this country. [24,25] but this is a contentious issue for politicians as the recent furor over the country's mortality statistics indicates [26 27].

What is not debatable is that coinfection with TB among HIV positive patients increases the risk of AIDS and death [28]. More than ten years ago the evidence for this was clear. For instance, a study looking at the TB control program in the Hlabisa district of KwaZuluNatal between 1991-1995 revealed a TB case fatality rate that was twice as high among the HIV positive patients in comparison to those without HIV infection [29]. No matter how politicians try to disguise the issue at hand – there is nearly a threefold increase in TB deaths in five years aggravated by the worsening HIV epidemic - the science and supporting research cannot be denied (Table 3).

(Table 3: TB Mortality in South Africa (% of all Deaths)

Source: Stats SA)

TB/HIV Interactions

The science community has responded to the increase in TB/HIV coinfection by conducting research looking at the effects, if any, these two diseases have on the progression of one another. HIV's effect on TB is better understood as it is more straightforward than tuberculosis' effect on HIV disease progression.

Because the immune system uses CD4 cells to defend the body against tuberculosis, a decline in CD4 cells (due to HIV) thus lessens the immune systems ability to prevent the growth and spread of *M. tuberculosis*.

[1]. Additionally, a weakened immune system allows for dissemination of the bacteria to areas other than the lungs, which explains the increased likelihood of extrapulmonary TB among HIV positive individuals.

TB has a more technical interaction with HIV and is thought to increase HIV replication and viral load, thus worsening the course of HIV related immunodeficiency. Much research has been done to reveal the mechanisms by which these interactions occur and the general consensus is that both promoter enhancement³ and cytokine activity⁴ play key roles in the heightened HIV activity seen in the presence of *M. tuberculosis* [31 38].

Research also shows that TB may reactivate latent HIV in monocytes recruited to sites of MTB infection via a stimulatory transcription factor [3940] and that latent HIV reservoirs are established at sites of MTB infection [41]. There is also evidence that TB increases systemic HIV heterogeneity [42 44] which could have future implications for resistance to antiretroviral (ARV) drugs.”