Common sense needed in HIV fight

A recent international Aids conference lacked input from those living with the HI virus

COMMENT
Alex Wolfe

The HIV Pathogenesis, Treatment and Prevention conference of the International Aids Society wrapped up in Kuala Lumpur just over two weeks ago. It would be wrong to deride the many serious efforts that weave together to form the collective activity underpinning this event, and naïve to think that the proceedings can be neatly summarised.

But it might be even worse to applaud unreflectively recent HIV-related "progress", and mouth words of routine recommitment to "the Aids struggle" to "end HIV-related stigma, issues of discrimination and scale up" HIV programmes, to use the standard terms of phrase.

To be "moving forward" to "maximise the prevention impact of antiretroviral treatment in line with newly upgraded guidelines issued, with some fanfare, by the World Health Organisation (WHO) - the most headline-grabbing aspect of which is the definition of a patient as "eligible" for receiving antiretroviral drugs.

The WHO declared that HIV-positive people with a CD4 count (a measure of the strength of the immune system) of 500 and below qualify for antiretroviral treatment. Previously, the WHO had recommended that treatment should be given when the CD4 count declines to 350 cells per cubic millimetre. The WHO now has a formal grade system for denoting the strength of recommendations on the "evidence and judgement" upon which they are based. The whole framework is understood to be intended to avoid unnecessarily lowering the bar to start treatment with broader issues such as "feasibility" and "acceptability", which means there could be more of a swiss cheese than a continuous space.

Under pressure from funders, policy wonks and advocates from market radicals, researchers and activists find themselves squeezed in to a discourse in which there is limited room for thinking beyond prodigious military adherence to the "study designs" of the reigning methodological hegemony.

But what is the common sense pattern of this fragmented "evidence"? Perhaps the answer lies more closely, further benefits are found of treatment of HIV by existing and emerging antiviral agents. And yet it is controversial whether treatment is a patient choice or a gift of "eligibility" in which the patient is cut out of a sufficiently depleted immune cell store. If there must be rationing, and perhaps sometimes there must, then there is rational rationing.

To the extent that antiviral drugs are neither free of cost or risk, let there be care and compassion, and judicious use. But the idea that bureaucratic backroom committee processes can somehow calibrate the perfect single out patients with HIV, the most treatable of any condition of comparable deadliness, for such a rocky road to treatment - this has surely outlived what superficial plau-

sibility it may have had when treatment was new, exhilarating, scary, and inconsistently effective.

The conference, like all HIV conferences, was full of success stories about treatment and yet the myth persists that unless some specific circumstance, not explicitly embraced by prior "guideline", is addressed by a sufficient grade of nearly fitting "evidence", then there is "ineligible" - the biomedical industry term declaring room for considered opinion to differ on a question - in this case whether there is "sufficient" benefit to treatment to justify "eligibility". A major source of friction on progress towards more expansive attitudes to treatment is over-reliance on statistical rather than mechanistic principles - that is, thinking about black-boxed processes that tend to lead to this or that, as observed under controlled conditions - to the exclusion of engaging with insights about the inner workings of the box.

In the context of thinking about treatment, what is missed in this discourse is that an untreated and currently treatment " ineligible" patient is not, in the real world, experiencing some "probability" of becoming sicker and hence "eligible" for treatment.

They are, in fact, on an inexorably downward slide, all the while at elevated risk of numerous unpleasant complications - for instance, the acquisition of tuberculosis or death. If there was a place to bet on outcomes, using odds implied by official discourse around treatment and equipoise, this would be known by economists and financial analysts as arbitrage - money for nothing for those paying attention, or a huge missed opportunity for those who are not.

Outdated discourse of treatment versus prevention, despite consider-

able shifts towards seeing the connections, still obses-

ses elementary points for which we currently lack a common language to find each

other. The likely cost of barrier-free, patient-controlled treatment initia-

tion in the short term, in terms of larger programmes and drug supply lines, cannot be evaluated rationally without a longer-term view.

As people live longer and more healthily, they also, crucially, are spectacles less infectious. This longer-term view can be encapsulated in "model scenarios", but not ones of predictive precision such as those that are legitimately demanded, for example, in next year's budgets and business plans.

The intergenerational time scales at play with a chronic infectious condition such as HIV are too long for any model to capture with high confidence. But scenario modelling is not all, or even mainly, about predicting the future like tomorrow's weather. There is considerable value in capturing patterns that we can expect to see, based on the internal coherence of rules and principles, which have been identified.

Systematic piecemeal investiga-

tions of narrowly defined and care-

fully controlled conditions help us to pin down those rules and pat-

terns, which we call models or theo-

ries. In fact, this careful step-by-step approach is really what is appro-

priately called science. But these practices should not then cause us to throw out the hard-won insights gained in favour of further disor-

ganised groping, demanding that each new situation be seen as a new black box, with new inner workings, requiring a new statistical sum-

mary. That is appropriately called a failure to learn. Sometimes learning requires a more or less sophisticated joining of the dots - sometimes it requires a child's realisation that the emperor has no clothes.

A particularly troublesome think-

ing box is the idea of an HIV-status "discordant" couple - a couple in which one partner is HIV positive and the other is HIV negative. As is usually the case with biomedical/biosta-

tistical concepts, it's the element of time that makes things tricky how long must this "couple" exist in order for the term to be meaningful? Also, can there be other sexual part-

ners in the wings and how would we know any of this, reliably, in the "studies" that provide "evidence" on the nature and importance of "dis-

cordant couples"? The resilience this thinking cage to a good old-fash-

ioned netting was revealed in a hilari-

ous exchange in session room one, where it was noted from the floor that all "(not some) as it is mainstream discourse" unusual HIV transmissions occur, by definition, within HIV-status "discordant" couples.

Unperturbed, the podium speaker defended the methodological defi-

nition of discordant couples he'd used in his presentation, in terms of which they account for a minority of infection. So mired have we become in "enrolment criteria", "strata" and "confounders" that we are prone to confusing arbitrary categories brought to bear on experiments and analyses with actual boundaries respected by viruses.

This notion of a discordant couple, of which one may, or may not, be declared to be a part, now confers, in the WHO's new guidelines, eligibility for antiretroviral treatment Initia-

tions on people otherwise unqualified, on account of being too healthy - as narrowly defined by their CD4 T-cell counts.

Perhaps someone should start a campaign to advise all HIV patients to declare themselves to be in sero-

discordant couples because who has the right to argue such a claim? Why exclude from treatment people who conform insufficiently to some notion of "stable" relationships?

It is usually said that this is pro-

tection for the hapless HIV-negative "stable partners" - who, it warrants noting, are seen in studies to be about as likely and, in some conditions, much more likely, to be infected by someone other than the nominal partner. Those potentially multiple partners of a patient lacking a stable primary partner - are they really less desiring of the protective effect of having the patient's viral load wiped out by treatment?

A good discussion about issues faced by sex workers, in a half-full mini-room three, noted to be a lively turn out by the standards that applied at this meeting, raised a great point, framed as a question: When will research on sex workers be sex-worker led? Is this possible, or mere-

lisp service to an ideal of inclusivity, equity and equality, one may ask. Actually, it's probably necessary for the research to come full cir-

cle and translate into changes that stick. Scientists could step back a lit-

tle more from their own ideas about "projects" and "experiments". We can try harder to communi-

cate facts and insights clearly and simply, and with enough humility to leave space for sex workers, rural women, men who still fearfully keep their relationships with other men in the shadows, teenagers, and all the others who bear the brunt of HIV - notably those who are infected, but not currently "eligible" for treatment, to engage with plain language of their choosing, and to bring to bear their own insights and demands.

Alex Wolfe is director of the depart-

ment of science and technology and the National Research Foundation Centre of Excellence in Epidemiolo-

gical Modelling and Analysis at the University of Stellenbosch.