

OPINION

Remedicalizing an epidemic: from HIV treatment as prevention to HIV treatment is prevention

Vinh-Kim Nguyen^{a,f}, Nathalie Bajos^{b,c}, Françoise Dubois-Arber^d,
Jeffrey O'Malley^e and Catherine M. Pirkle^f

AIDS 2010, **24**:000–000

Keywords: HIV, microbicides, antiretroviral therapy, prevention, medicalisation, victim-blaming, politics of science

Bold claims of a 'paradigm shift' at the recent World AIDS Conference signal a striking remedicalization of our approach to the HIV epidemic and a return to the early 1980s view of the epidemic as a medical problem best addressed by purely technical, biomedical solutions whose management should be left to biomedical professionals and scientists [1]. This is reflected in the assertion by the outgoing President of the International AIDS Society that aggressive diagnosis and treatment of HIV should emerge as the most significant theme of the conference, 'over and above the human rights issue' [2]. Studies were presented to demonstrate that antiretroviral drugs and microbicides should now be included alongside male circumcision in the biomedical armamentarium of 'new HIV prevention technologies' (NPTs). 'NPTs' were even touted as potentially more effective than 'old' prevention technologies of condoms [3] based on misleading comparisons between data from randomized controlled trials of simple interventions and observational studies – even though other studies have demonstrated that combined prevention (NPTs + condoms) were more effective than NPTs only. Despite impressive evidence that 'old' prevention has resulted in declining incidence in youth in the most affected countries [4], the enthusiasm for NPTs made it seem as though more classical approaches do not work.

Concerns that prevention efforts might be undermined by such biomedical triumphalism cannot be dismissed in light of evidence that prevention efforts are already compromised by the growing emphasis on treatment. Increased investment in treatment is welcomed, but it is profoundly disturbing that prevention remains grossly underfunded even as treatment budgets explode [5]. Nowhere are the dangers of this remedicalization clearer than in the case of 'treatment-as-prevention' (TASP), widely trumpeted as a 'game-changer' and a 'paradigm shift' in the battle against HIV/AIDS.

We have known for years that HIV is highly unlikely to be transmitted when it is undetectable in the blood and therefore, that highly active antiretroviral therapy (HAART), which decreases viral load to undetectable levels if taken correctly, is likely to reduce infectivity. TASP received a boost with the publication of a study that showed a decline in HIV incidence as HAART coverage expanded in the Canadian province of British Columbia [6,7]. Yet, the evidence to support a paradigm shift in favour of TASP can be challenged. Incidence of HIV has not decreased over the past years in Canada, the US, and Europe despite improving access to diagnosis and increasingly efficacious treatment [4]. Indeed, many studies report increasing incidence in high-risk groups

^aClinique Médicale l'Actuel, Université de Montréal, Montréal, Québec, Canada, ^bINSERM- CESP U1018, Paris and Université Paris XI, France, ^cLondon School of Hygiene and Tropical Medicine, London, UK, ^dInstitute of Social and Preventive Medicine (IUMSP), Centre Hospitalier Universitaire Vaudois and University of Lausanne, Lausanne, Switzerland, ^eHIV/AIDS Practice, UN Development Programme, New York, USA, and ^fÉcole de santé publique, Université de Montréal, Montréal, Québec, Canada. Correspondence to Catherine M. Pirkle, School of Public Health, Université de Montréal 1430 boul. du Mont-Royal, Montreal, Quebec, Canada.

E-mail: catherine.pirkle@umontreal.ca

Received: 17 August 2010; accepted: 26 August 2010.

DOI:10.1097/QAD.0b013e3283402c3e

with good access to treatment, such as men who have sex with men (MSM) [8,9]. In San Francisco, despite free HIV treatment and care and some of the highest rates of HIV testing anywhere, increases in risk behaviour have overwhelmed any decreases in infectivity due to HAART in MSM [10].

The lack of impact of ART on incidence would not be surprising in light of research suggesting that up to two-thirds of HIV transmission events occur during acute HIV infection, which is virtually impossible to diagnose in a timely manner as it occurs prior to seroconversion [11]. Moreover, it is unlikely that early diagnosis and treatment will be possible without paying serious attention to the social inequalities and stigmatization that already determine vulnerability to acquiring HIV and accessibility of diagnosis and treatment. Clearly, TASP is being advanced with the laudable goal that this will help boost enthusiasm for funding treatment in the global fight against AIDS. However, as the Government of Canada's refusal to endorse harm-reduction approaches to intravenous drug use showed, even the best scientific evidence does not sway governments.

We share three concerns about this remedicalization. First, why promise a magic bullet when we already know that any biomedical intervention is unlikely to offer more than partial effectiveness? For TASP to work as a prevention strategy, at least 75% of HIV-positive individuals must be diagnosed and treated [12], a level already above what is achieved in Northern countries with universal health insurance and good access to testing and treatment [13]. Treatment is certainly a weapon in our armamentarium against HIV, but should be viewed appropriately as a humane response to the suffering brought on by infection with prevention possibilities. It is not a substitute to the removal of the vulnerabilities that place people at risk of infection in the first place (which incidentally, overlap with vulnerabilities preventing access to treatment).

Second, whereas biomedical prevention interventions have significant potential to deliver powerful new tools to combat HIV, this should not preclude lively and vigorous debate on their effectiveness and their implications, a debate that was repeatedly shut down at this conference by invocations of 'lives are at stake' or accusations that those who questioned the new paradigm were being ideologically driven. Paradoxically, the emphasis on TASP undermined the most important message: that policy should be based on evidence and not ideology. The main message of the conference – rights here, right now – was overshadowed by the focus on biomedical intervention.

Third, in the rush to paradigm shift, game-change, roll-out and scale-up yet a new set of acronyms and standardized interventions, local epidemiological, political, and socio-historical context is once again being

ignored, surely only to resurface later as 'culture' once much-heralded interventions fail to deliver. Holding out for a magic bullet – unlikely to ever come – diminishes interest in the hard, messy work required to enable social change and address the social inequalities and structural violence that drive this epidemic. Biomedical interventions are unlikely to live up to their promise if social determinants of access to prevention and treatment are not addressed.

Remedicalization has the potential to reverse 30 years of AIDS activism. Nowhere was this clearer than at one session, in which activists were wrongly blamed for shutting down unethical PrEP trials and thereby delaying the identification of an effective microbicide [14]. In order for biomedical intervention to work at a population level, individuals must not only be compliant, but also accept potential risks to their physical, psychological and social health. Inadequate attention to the social determinants of their uptake will compromise an otherwise promising intervention. By remedicalizing the epidemic, we are a step away from returning, once again, to blaming the victims. It is time to move forwards, not backwards.

Acknowledgements

All authors contributed to the drafting and revision of this opinion article.

There are no conflicts of interest.

References

1. Seidel G. **The competing discourses of HIV/AIDS in sub-Saharan Africa: discourses of rights and empowerment vs. discourses of control and exclusion.** *Social Sci Med* 1993; **36**:175–194.
2. Montaner JSG. Opening press conference. In *XVIII International AIDS Conference*. Vienna, Austria; 2010.
3. Hirschel B. Anti-HIV drugs for prevention. In *XVIII International AIDS Conference*. Vienna, Austria; 2010.
4. UNAIDS, WHO. 09 AIDS Epidemic Update. In Geneva; 2009.
5. Merson MH, O'Malley J, Serwadda D, Apisuk C. **The history and challenge of HIV prevention.** *Lancet* 2008; **372**:475–488.
6. Montaner JSG, Lima VD, Barrios R, Yip B, Wood E, Kerr T, *et al.* **Association of highly active antiretroviral therapy coverage, population viral load, and yearly new HIV diagnoses in British Columbia, Canada: a population-based study.** *Lancet* 2010; **376**: 532–539.
7. Maggiolo F, Leone S. **Is HAART modifying the HIV epidemic?** *Lancet* **376**:492–493.
8. Grulich AE, Kaldor JM. **Trends in HIV incidence in homosexual men in developed countries.** *Sex Health* 2008; **5**:113–118.
9. Hamers FF, AM D. **The changing face of the HIV epidemic in western Europe: what are the implications for public health policies?** *Lancet* 2004; **364**:83–94.
10. Scheer S, Kellogg T, Klausner JD, Schwarcz S, Colfax G, Bernstein K, *et al.* **HIV is hyperendemic among men who have sex with men in San Francisco: 10-year trends in HIV incidence, HIV prevalence, sexually transmitted infections and sexual risk behaviour.** *Sex Transm Infect* 2008; **84**:493–498.

-
11. Cohen MS. **ART and HIV: treatment as prevention.** In *XVIII International AIDS Conference*. Vienna, Austria; 2010.
 12. Lima Viviane D, Johnston K, Hogg Robert S, Levy Adrian R, Harrigan PR, Anema A, Montaner Julio SG. **Expanded access to highly active antiretroviral therapy: a potentially powerful strategy to curb the growth of the HIV epidemic.** *J Infect Dis* 2008; **198**:59–67.
 13. Surveillance and Risk Assessment Division. **Summary: estimates of HIV prevalence and incidence in Canada, 2008.** In *Centre for Communicable Diseases and Infection Control, Public Health Agency of Canada*; 2009.
 14. Karim SA. **Understanding HIV transmission mechanisms: microbicides and PrEP.** In *XVIII International AIDS Conference*. Vienna, Austria; 2010.