

Introduction to U=U: for Nepal Trans and MSM workshop



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www.i-Base.info

www.i-base.info

U=U Nepal Trans and MSM group, May 2021

Thank you for arranging this virtual workshop - it will be very informal - lots of time for questions and discussions.

Overview

- Introductions
- A strategy for U=U in Nepal
- First questions
- Example leaflet and poster form UK
- Studies that prove U=U is a FACT
- Other community responses

U=U strategy in Nepal?

- Train ourselves - learnt the facts.
- Community resources to tell other HIV+ people: workshops, leaflets and posters.
- Working with key doctors and health workers - to get the doctors to publicise in guidelines
- Be creative.

Having a strategy for the next year might include some of these things.

i-Base fact sheet for the UK - god to all HIV clinics.

<https://i-base.info/u-equals-u-qa/>

(many translations including Japanese)



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U=U Nepal Trans and MSM group, May 2021

Here is a leaflet we did in the UK that was translated for other countries

i-base

U=U*
UNDETECTABLE
viral load means HIV IS
UNTRANSMITTABLE
* Undetectable = Untransmittable

Free leaflets,
postcards, to
clinics and
online:
i-Base.info

U=U
undetectable
viral load
=
untransmittable
HIV

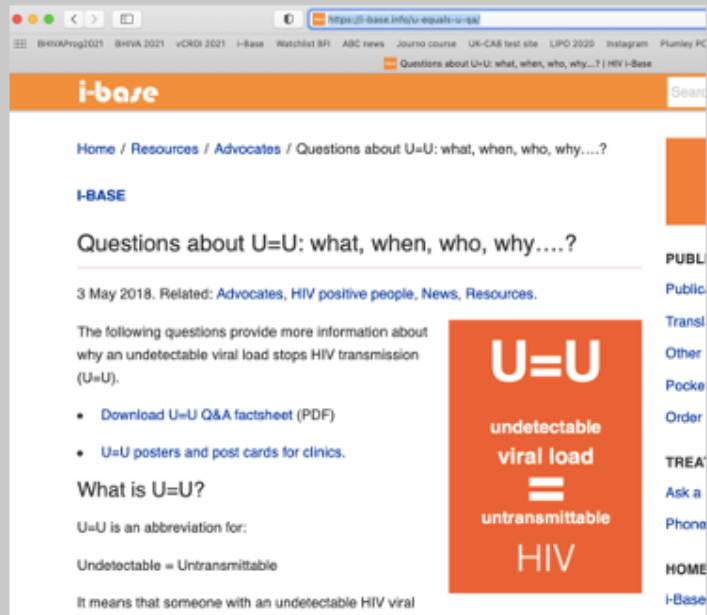
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i-Base put resources online and printer leaflets and post cards.

Website

<https://i-base.info/u-equals-u-qa/>



Here is the i-Bse website page

Talk is from a perspective of a community advocate for the last 20+ years.

As an introduction I will say a little about my organization and recent work.

I will briefly outline the evidence that convinced me to support U=U.

And I will talk about the different community and professional ways that U=U has been adopted in the UK

First questions

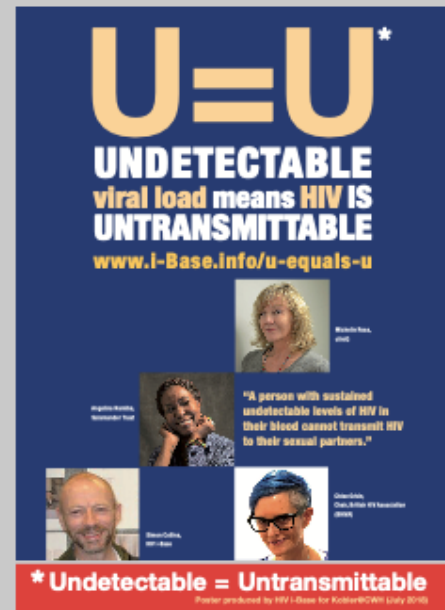
- What is U=U?
- What does U=U involve?
- How can someone not be infectious?
- Does U=U work for everyone?
- Does this work with all HIV drugs?
- Does U=U work for all types of sex?
- Does this mean I can stop using condoms?

The leaflet started with these questions

i-base

Posters for
different
clinics

[https://i-
base.info/u-
equals-u-qa/](https://i-base.info/u-equals-u-qa/)



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i-Base also produced posters for clinics that could be adapted to you doctors and HIV positive people from each clinic.



- HIV Scotland donation boxes with U=U screens.
- Beermats for bars.
- Led Edinburgh Pride.



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HIV Scotland had a similar campaign in Scotland to raise awareness in gay bars and at Gay Pride.

THT Can't Pass It On Campaign, 2017-2019

Launched in Summer 2017 for Pride in London and used on social media.



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THT is the largest and best know HIV-based charity - now focused on sexual health.

The first THT “cant pass it on’ campaign was launched in Summer 2017 for Pride in London and used on social media – and continued each year in 2018 and 2019

Brighton: “Making stigma history”



<https://www.themartinfisherfoundation.org>

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This is just because I like the photo and that U=U switching switch bus routes in Brighton

One side of the bus says :Towards zero HIV“ and the other “HIV isn’t scary anymore”.

More questions

- My partner is HIV+ and wants to use condoms
- My partner is HIV– and wants to use condoms
- Is U=U now widely believed?
- Do STIs affect the risk?
- Will my doctor know about this?
- How for viral load take to be undetectable?
- What if I forget my meds?

Here are a other set of questions that are answered in the leaflet

U=U...

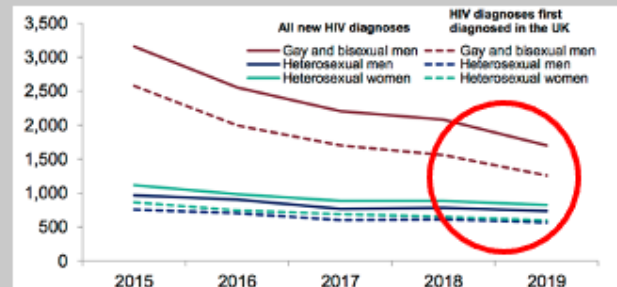
- Is now a FACT.
- Originally a lot of people hated the idea.
- Many HIV positive people worried.
- Many doctors worried.
- Evidence took 20 years – just like PrEP (1994 to 2012)
- Perhaps be angry this took so long – and that we are still fighting.



U=U was a difficult thing for many people to accept and believe.

UK Combination prevention

- Significant HIV drop for last 3 years (even though more testing and less condoms).
- Regular HIV testing, more often.
- Early ART (within a week).
- Nice clinics, free PrEP
- Lock down/COVID: stopped most monitoring, PrEP continued etc



Public Health England. <https://www.gov.uk/government/publications/hiv-in-the-united-kingdom>

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It is also part of combination therapy that in the end reduced the numbers of people being diagnosed every year.

94,000 are diagnosed (92%). Of these 98% are on ART and 97% are undetectable.

New diagnoses significantly fell over the last two years: combination of more frequent testing, early and universal ART, better ART and access to PrEP.

More clinics routinely start same-day ART – within a few days. Confirmatory HIV testing is not needed because false positive is so rare and viral load and resistance test results will be back within 1-2 weeks. Reduces loss to care.

Universal ART based on results from START study.

Late diagnosis is still a problem.

Evidence and proof

<http://i-base.info/htb/32308>

Different types of studies all showed U=U.

Expert opinion.

Observational studies – just watching a group.

Evidence review – of many different studies.

Randomised studies (but still with condoms used)

Large observational study without condoms and with diaries to calculate risk.

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Different types of studies all supported the evidence that U=U.

They all showed the same result - that HIV is not transmitted sexually when viral load is undetectable

Evidence and proof

<http://i-base.info/htb/32308>

- 1998 US guidelines ^[1] and ART preventing MTCT ^[2]
- 2000 Rakai cohort ^[3]
- 2008 Swiss statement – challenge to publish cases ^[4]
- 2011 HPTN-052 ^[5] ← 2009 PARTNER starts
- 2014 PARTNER 1 ^[6] ← 2016 U=U launch
- 2018 PARTNER 2 ^[7]

1. DHHS, 1998; 2. Beckerman K et al IAS 1998; 3. Quinn T et al, NEJM 2000; 4. Vernazza P et al; 5. Cohen et al, NEJM 2011; 6. Rodgers A et al. CROI 2014 and JAMA 2016; 7. Rodgers A et al, IAS 2018 and The Lancet, 2019.

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A summary of the evidence is also probably useful as the plausibility of ART reduced the risk of transmission has been known for more than two decades.

The 1998 US DHHS treatment guidelines recommended early ART to reduce risks to partners back in 1998 – also Karen Beckerman's poster at IAS Conference in Geneva.

The Rakai cohort in Uganda in heterosexual couples before effective ART reported no transmissions between when viral load was < 400.

In 2008 the Swiss Statement suggested risk was zero based on evidence review of smaller studies – but also because they worked closely with the sperm-washing clinics and had samples from more than 600 serodifferent couples trying to conceive. The PARTNER study was planned to provide evidence to support the Swiss Statement.

HPTN-052 – again in serodifferent couples – reported only one transmission in the first weeks of ART when viral load would still have been high and detectable.

Then the large international PARTNER studies produced a large dataset showing the absence of transmission – in a study designed to actively look for such cases.

PARTNER 2 extended and expanded the number of gay male participants – where sexual risk from anal sex is highest – with zero transmissions after more than 77,000 sexual exposures.

The U=U campaign changed everything: from a scientific agenda to a mainstream public health campaign on an international stage. It is remarkable that within just a few years, it is now unthinkable to go back to pre-U=U time.

Evidence 1998

<http://i-base.info/htb/32308>

1998 US guidelines ^[1]
and ART in pregnancy. ^[2]

Major US guidelines: ART could reduce
transmission... (still need condoms).

ART in pregnancy reduced
risk to babies to almost zero.

1. DHHS, 1998; 2. Beckerman K et al IAS 1998



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The 1998 US DHHS treatment guidelines recommended early ART to reduce risks to partners back in 1998 – also Karen Beckerman's poster at IAS Conference in Geneva.

Evidence 2000

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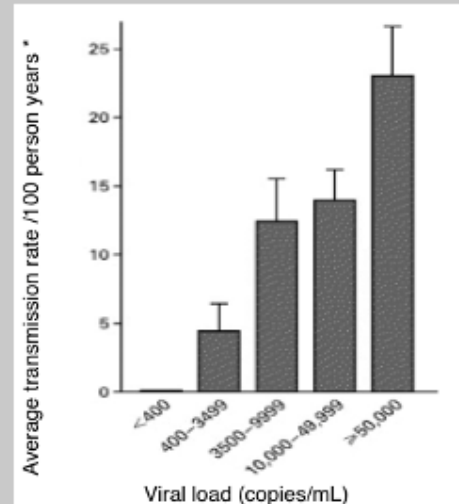
2000 Rakai cohort [3]

400 heterosexual couples

Observational study

No treatment – just link to viral load

3. Quinn T et al, NEJM 2000



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The Rakai cohort in Uganda in heterosexual couples before effective ART reported no transmissions between when viral load was < 400.

Evidence 2008

<http://i-base.info/htb/32308>

2008 Swiss statement
challenge to publish cases [4]

Experts review 20+ studies inc.
“spermwashing”

Zero risk – safe to conceive a baby
WITHOUT condoms.

4. Vernazza P et al;



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In 2008 the Swiss Statement suggested risk was zero based on evidence review of smaller studies – but also because they worked closely with the sperm-washing clinics and had samples from more than 600 serodifferent couples trying to conceive.

Evidence 2011

<http://i-base.info/htb/32308>

2011 HPTN-052 [5]

Large randomised study:
Early ART vs late ART
1700 serodifferent couples

All transmission were in
couples without ART.

5. Cohen et al, NEJM

1700 couples

1/28
early with
high VL

27/28
no ART

96% reduction

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HPTN052 early vs late ART in serodifferent couples

Evidence 2014, 2016, 2018

<http://i-base.info/htb/32308>

PARTNER 1 ^[6] & PARTNER 2 ^[7]

ZERO after 53,000 times – gay
and straight - no condoms

ZERO after 77,000 times - gay
men only – no condoms

[undetectable below 200 c/mL]

6. Rodgers A et al. CROI 2014 and JAMA 2016; 7. Rodgers A et al, IAS 2018



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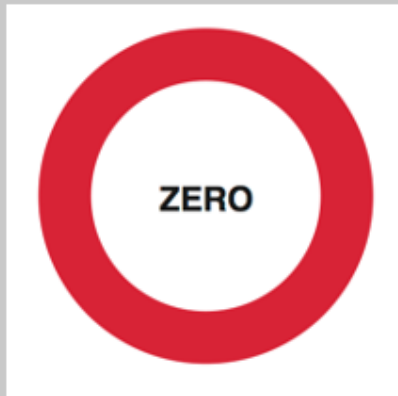
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The PARTNER study was planned to provide evidence to support the Swiss Statement.

This large international PARTNER studies produced a large dataset showing the absence of transmission – in a study designed to actively look for such cases.

PARTNER 2 extended and expanded the number of gay male participants – where sexual risk form anal sex is highest – with zero transmissions after more than 77,000 sexual exposures.

PARTNER studies



PARTNER 1: zero transmissions after gay and straight couples had sex more than 56,000 times ^[1]

PARTNER 2: zero transmissions after gay couples had sex more than 77,000 times ^[2]

1. Rodgers A et al. CROI 2014 and JAMA 2016; 2. Rodgers A et al, IAS 2018 and The Lancet, 2019.

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It is worth reporting the top line results from PARTNER again.

These observational studies tracked tracked real exposures/risk, included STIs and low level blips (is <200 c/mL) and still couldn't find a single linked transmission.

Reverse challenge

- Data now reverses the scientific challenge:
Anyone suggesting transmission is possible should now provide evidence to support this hypothesis.
- No cases 11 years after the Swiss Statement.
- No cases in >100,000 times in PARTNER.

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The accumulated data supporting U=U now reverses the scientific challenge.

Anyone with a hypothesis that transmission might still occur with an undetectable viral load now faces a challenge to provide evidence to support this.

There is currently none – including the absence of case reports in the 11 years since the Swiss Statement.

The rest of my talk will look at what we communicated this in the UK

How to communicate...



- **Community** groups for greater awareness for HIV+ and HIV– :
Prevention Access Campaign!
- **Professional** – awareness & consistency by doctors and health workers.
- Inclusion in **guidelines** and **standards**.



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As confidence grew in U=U it was quickly clear that this was something that needed to be widely publicised.

Community groups provided an early lead.

But the lead taken by professional organisations was equally essential.

U=U needed to be clearly communicated by all doctors to all patients.

Can't Pass It On campaign

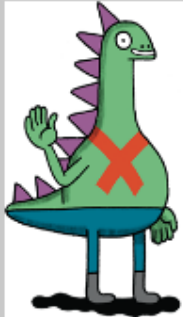


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Later campaigns used more diverse images and included billboards with online videos.

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Thank you

Questions?

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Disclosure

No personal financial conflict of interest

But... I am HIV positive and I think pharma companies should support community projects from their profits with unconditional grants.

Posters

<https://i-base.info/u-equals-u-qa/>

Sent to all HIV clinics.
Included HIV positive people.



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I would like to thank the Japanese Society for AIDS Research for the honour of invitation to speak at this important and timely meeting

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