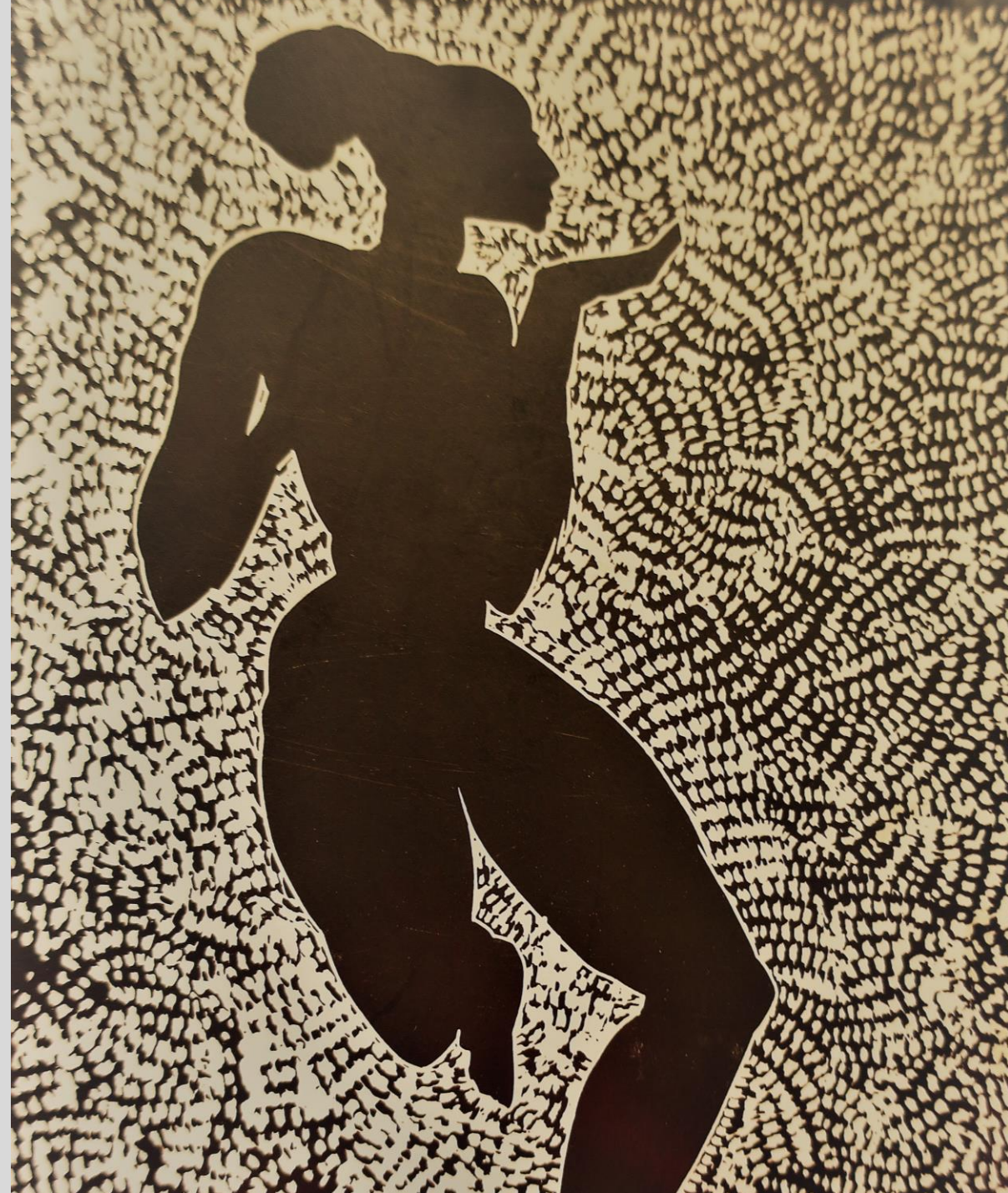


REPRODUCTIVE HEALTH

Riikka Teperi RN, Sexual Therapist
Finland



TOTAL NUMBER OF DIAGNOSED
HIV CASES IN FINLAND=4150
(100-200 NEW CASES PER YEAR)

1980 first HIV case

1983 first female HIV case

Until 1999, 40-80 cases (all) per year

From 2000 onwards, 40-70 female cases per year

1980 - 2019

Men: 2994 (72%)

Women: 1156 (28%)



Pregnancies of HIV-positive women 1983 - 2013

National Infectious Diseases Register

Medical Birth Register

Finnish Maternity Cohort Register

212 HIV-positive mothers diagnosed
before or during the pregnancy

12 mothers
diagnosed HIV-
positive <2 years
after the pregnancy

0 HIV-positive
children

290 HIV-negative
children

3 HIV-positive
children
9 HIV-negative
children

SEXUAL AND REPRODUCTIVE HEALTH OF WOMEN LIVING WITH HIV IN FINLAND

Studies at Inflammation Center / Division of Infectious Diseases,
Helsinki University Hospital 2012-2016

- Study I: 560 WLWH from Helsinki University Hospital and largest outpatient clinics from Denmark.
- Study II: including all women attending the Helsinki University Hospital's outpatient clinic for HIV care at least two times during 2002-2013.
- Study III and IV: including all women having delivered at least one child after HIV-diagnosis in Finland 1983-2013.

LIST OF ORIGINAL PUBLICATIONS

I. Wessman M, Aho I, Thorsteinsson K et al.

Perception of sexuality and fertility in woman living with HIV: questionnaire study from two Nordic countries.

J Int AIDS Soc 2015 Jun 1; 18:19962.

II. Aho I, Kivelä P, Haukka J et al.

Declining prevalence of cytological squamous intraepithelial lesions of the cervix among women living with well controlled HIV...

Acta Obstet Gynecol Scand 2017 Nov; 96 (11):1330-1337.

III. Aho I, Kivelä P, Kaijama M et al.

Comprehensive nationwide analysis of mother-to-child HIV transmission in Finland from 1983 to 2013.

Epidemiological Infect 2018 Jul; 146 (10):1301-1307.

IV. Aho I, Kaijama M, Kivelä P et al.

Most women living with HIV can deliver vaginally - national data from Finland 1993-2013.

PLoS One 2018 Mar 22; 13(3):e0194370.

CONCLUSIONS OF THE STUDIES

- HIV- infected women in Denmark and Finland are in good physical health with good treatment response to HIV treatment.
- 2002-2013 improved results: at the end of study period, 87% of PAPA smears showed normal findings.
- Of 2012 pregnant women with HIV, 46% were diagnosed during pregnancy (outside HUCH 65%).
- Of all deliveries, 75% were vaginal. The low level of cesareans in Finland will protect their childbearing possibilities in the future.

PERCEPTIONS OF HIV POSITIVE WOMEN ON SEXUALITY

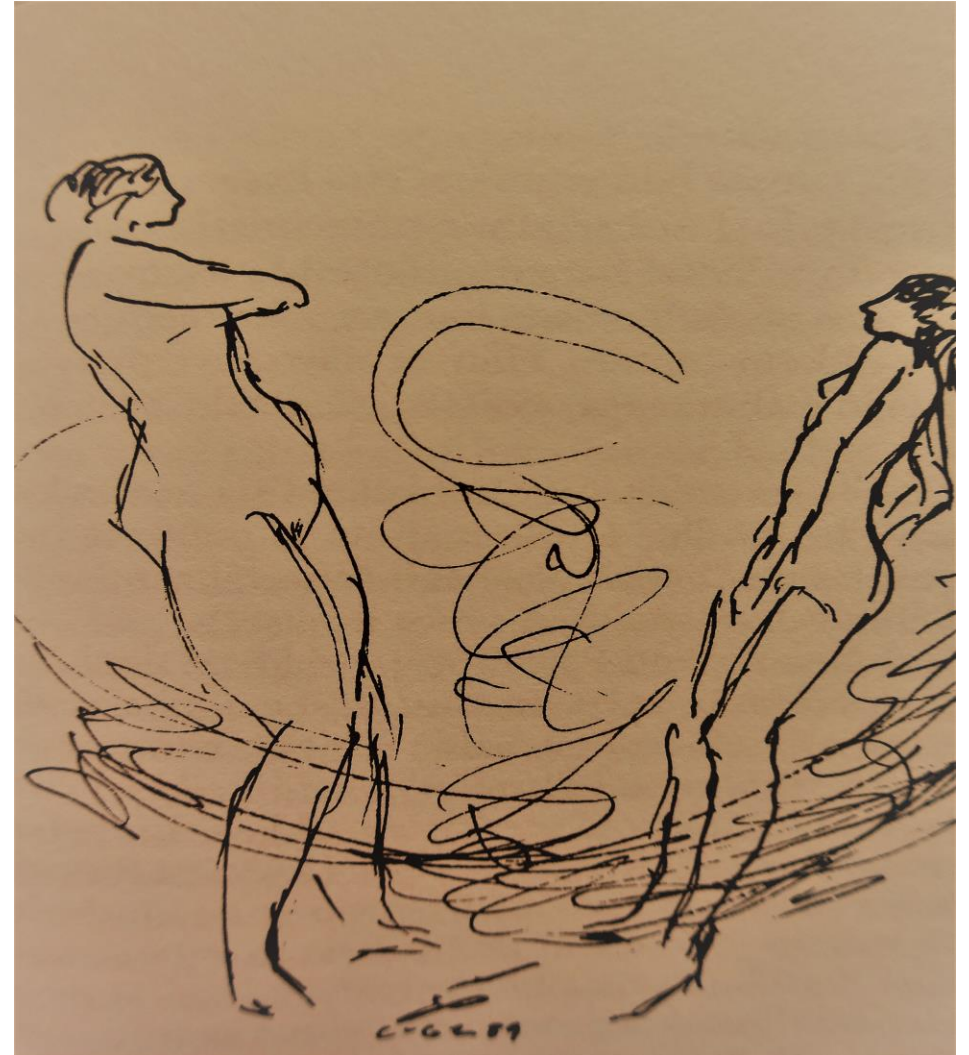
50% thought HIV diagnosis had changed their sex life.

25% felt isolated and

40% did not dare to have sex.

94% of the women had disclosed their dg to someone outside healthcare (mostly partners; also to siblings, friends and children).

One-third had disclosed their diagnosis to less than three people.



CHILDBEARING INTENTIONS

- Two-thirds live in steady relationship, mainly with an HIV-negative partner.
- One-third of them were sexually inactive: age, HIV-treatment response, or partner's HIV status were not associated with amount of sexual activity.
- Majority of the women had children, 25% desired to have children.
- 15 % overestimated the risk of MTCT.



DELIVERIES BY HIV+ WOMEN 1993 - 2019



- Deliveries in HUCH:
 - 1993 - 1999 – about 4 deliveries per year (n=26)
 - 2000 - 2016 – about 10 deliveries per year (n=162)
 - 2017 - 2019 about 30 deliveries every year
- Until 2019, 450-500 children in all in Finland.
- Type of deliveries in HUCH 2006 – 2013
 - Vaginal deliveries 77%
 - Caesarean deliveries 23 %
 - emergency operations (8%)
 - others (15%; obstetric reasons, high transmission risk of HIV or HCV viruses)

TREATMENT OF HIV+ WOMEN IN FERTILE AGE

- NURSE'S ROLE

- 1) Giving correct information
- 2) Helping reach realistic understanding of
 - Pregnancy
 - Childbirth
 - Recognize own resources
- 3) Encouraging women to fulfill their dreams
- 4) Helping to plan ahead
 - Living in a relationship
 - Becoming a mother



GYNECOLOGICAL FOLLOW-UP OF HIV+ WOMEN

- Goals:
 - Effective contraception
 - Identifying abnormal pap smears
 - Identifying other gynecological symptoms
- Every new HIV+ woman referred to a gynecologist
 - Gynecological history and status
 - First pap smear, next one after 1 year, then every 3rd year
- Gynecology control visit every 1-3 years
- Risk of abnormal pap smears 2,9-5 % (higher than among all women)
- Other risk factors:
 - Smoking, HPV-infection, bacterial vaginosis, STD's, low CD4 cell counts

CONTRACEPTION



Aim: All HIV+ women's pregnancies are planned

- Contraception:

First choice is hormonal intrauterine device (In HUCH, free to HIV patients)

- does not change HIV medication effectiveness
- does not induce higher HI-virus counts in the genital tract

Other good options:

- Copper intrauterine device
- Contraceptive pill (very few trials)
- Subdermal contraceptive capsule (possible interaction with HIV medication)

HOW WE TREAT - TEAMWORK AT HUCH (HELSINKI UNIVERSITY CENTRAL HOSPITAL)

Infectious disease polyclinic

- HIV follow-up and care co-ordination during / after pregnancy

Ob & Gyn polyclinic

- antenatal follow-up, childbirth

Pediatrics polyclinic

- meeting women & family before delivery
- information to mothers and obstetrics department personnel about newborn medication
- 2-year follow up

Co-ordination meetings of the polyclinics every 6 weeks

PLANNING FOR PREGNANCY

- 1) Both woman and man HIV+, no drug resistant virus strains
(virus loads of both need to be low, HIVN_h < 50)
 - normal intercourse
- 2) Serodiscordant couples told: Swiss statement, WHLW
PARTNER- trials findings

PLANNING FOR PREGNANCY

Earlier protocol (not used anymore)

HIV+ women, HIV- man

- start HIV medication to women before pregnancy
- teach to identify ovulation time
- Home insemination. 'Mumincup' - syringe treatment.
- (If sperm taken from condom, condoms without spermicide)



HIV+ WOMEN AND PREGNACY

- Ensure optimal HIV medication
- Start medication as soon as possible (For fertile aged women it is usually started soon after the HIV diagnosis)
- If poor medication adherence, start DOT (Directly Observed Therapy)
- HI virus load control 1-2 times in every 2 months, copies need to be <20.
- Glucose tolerance test recommended. Check the vaccination: German measles, measles.
- No breast feeding. (If woman wants to breastfeed, monthly HI-virus load check. Pediatric opinion for HIV medication of the child)
- Very important to have a control visit at week (34)- 36
 - Planning the type of delivery
 - Vaginal birth is the primary choice

HIV+ WOMAN AND DELIVERY

- If mother has ART at week 36 and HIV virus load < 200, vaginal delivery planned
 - Elective caesarean section at week 38, if it's because of HIV
 - In other cases Zidovudine infusion during the pregnancy (in caesarean delivery start 3 hrs before)
 - Avoid invasive procedures (No intrauterine registering or micro blood samples, avoid episiotomy)
- If woman hasn't been attending a prenatal clinic, and no HIV test has been done, while there is strong suspicion of HIV infection :
 - Start same zidovudine protocol as above, but immediately

FOLLOW-UP OF CHILDREN TO HIV+ WOMEN



Before
delivery:

New born
baby:

2 days old
baby:

3 weeks time:

- Meeting with mother, medication planning
- Big blood count, check contra-indications to start medication, no breastfeeding
- HI –virus load
- Big blood count (anemia, symptoms of primary infection)
- Anemia? Any symptoms of primary illness - need to raise dose of medication. Plan to stop HIV medication in week 4

FOLLOW-UP OF CHILDREN TO HIV+ WOMEN

- 2 months:

- 4 months:

- 18 months:

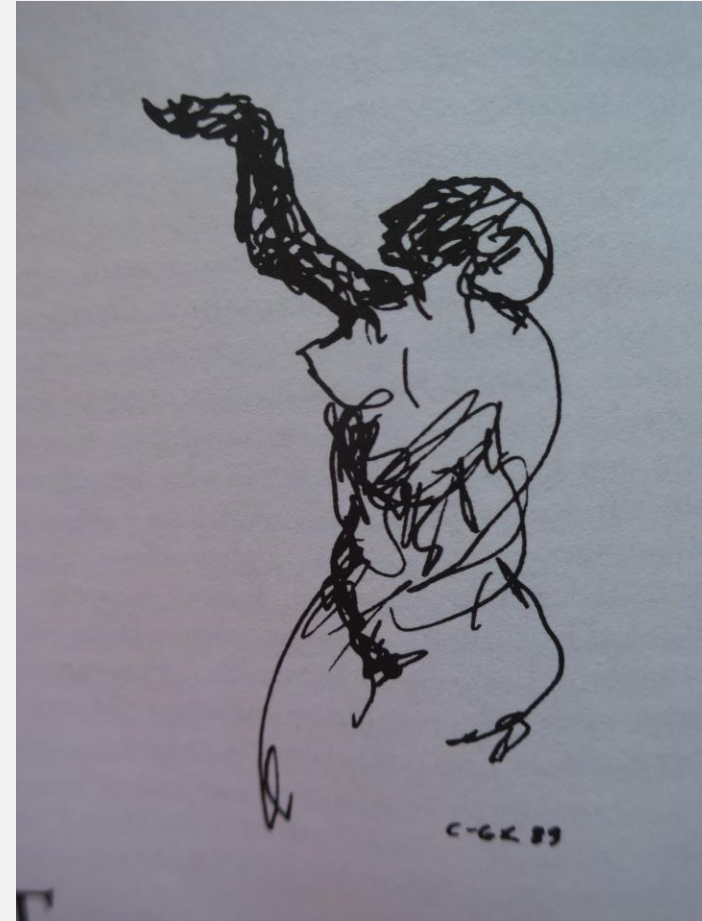
- Big blood count, HI- virus load.
Any symptoms?

- HI-virus load (big blood count).
- If HI- virus load negative x 3 child is not infected
- Give a BCG vaccination

- If HIV AgAb antibodies have disappeared stop the follow up, contact only when needed

MENOPAUSE

- HIV+ women reach menopause earlier than average women
- Hormonal replacement therapy (HRT): same goals as among other women
- Because HIV medication might reduce treatment effect, possible need to increase the dose
- Sexuality should be discussed with women of all ages



THANK YOU!

Inka Aho. Sexual and reproductive health of women living with HIV in Finland. Doctoral Programme in Clinical Research, University of Helsinki. Helsinki, Finland 2018

- Nuno Nobre. Quality of Life of People Living with HIV/AIDS in Finland. Department of Public Health, Faculty of Medicine. Doctoral Programme in Population Health, University of Helsinki, Finland 2018
 - [www. Arvosta.fi](http://www.arvosta.fi), 2019
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Graphics: Carl-Gustaf Lilius

