

Care to HIV+ women and children in St. Petersburg

Anna Samarina

*Doctor of Medicine, head of mother and child
department at St. Petersburg City AIDS Centre
Associate professor at the Department of Social
Infections / Pavlov Medical University*



HIV situation in St. Petersburg (as of 1.1.2017)

Number of diagnosed – 53 888 persons

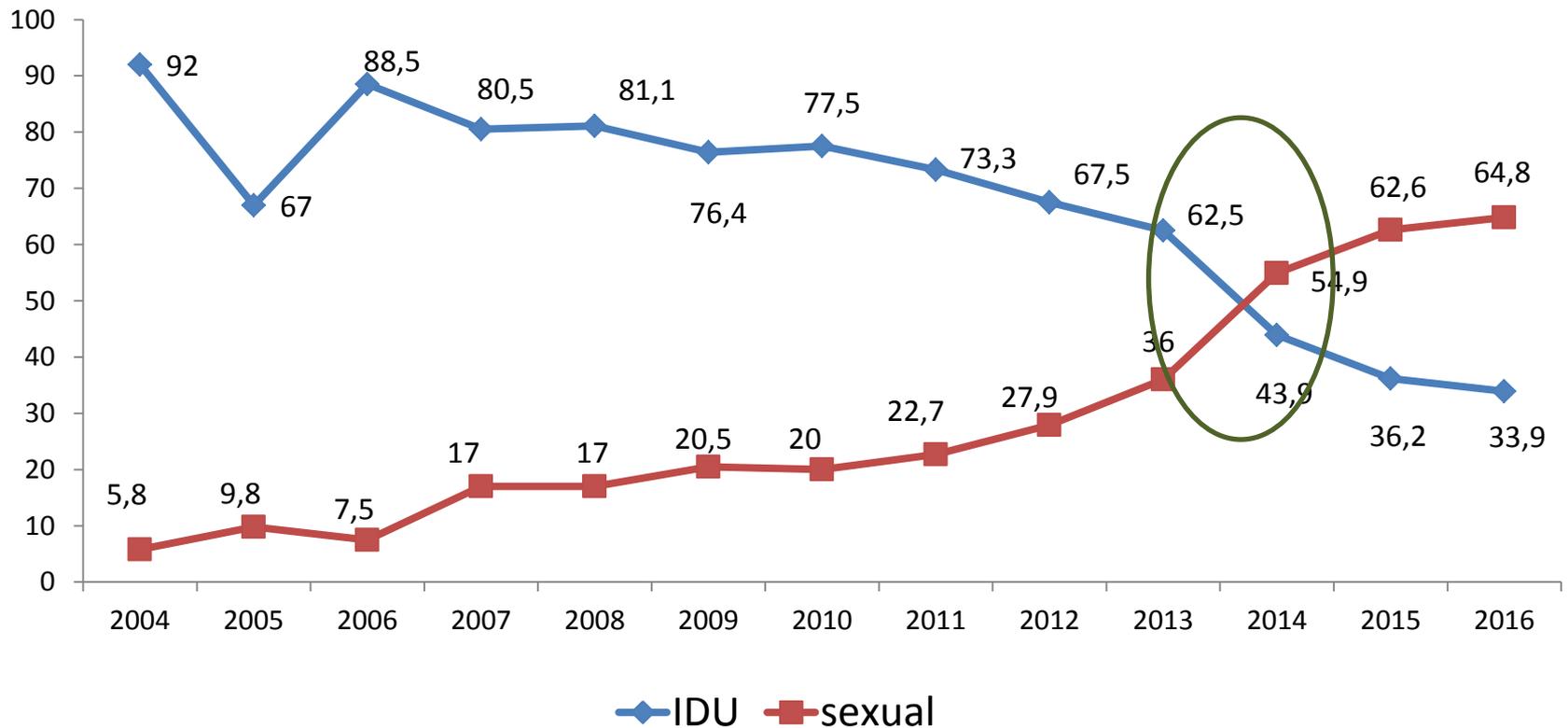
Number of deaths – 11 539 persons

Number of PLWHs – 42 349 persons

(as of 1.10.2016 the prevalence is - 852,6 per 100,000 residents of St. Petersburg, 14th place in Russia, according to the Federal AIDS Centre



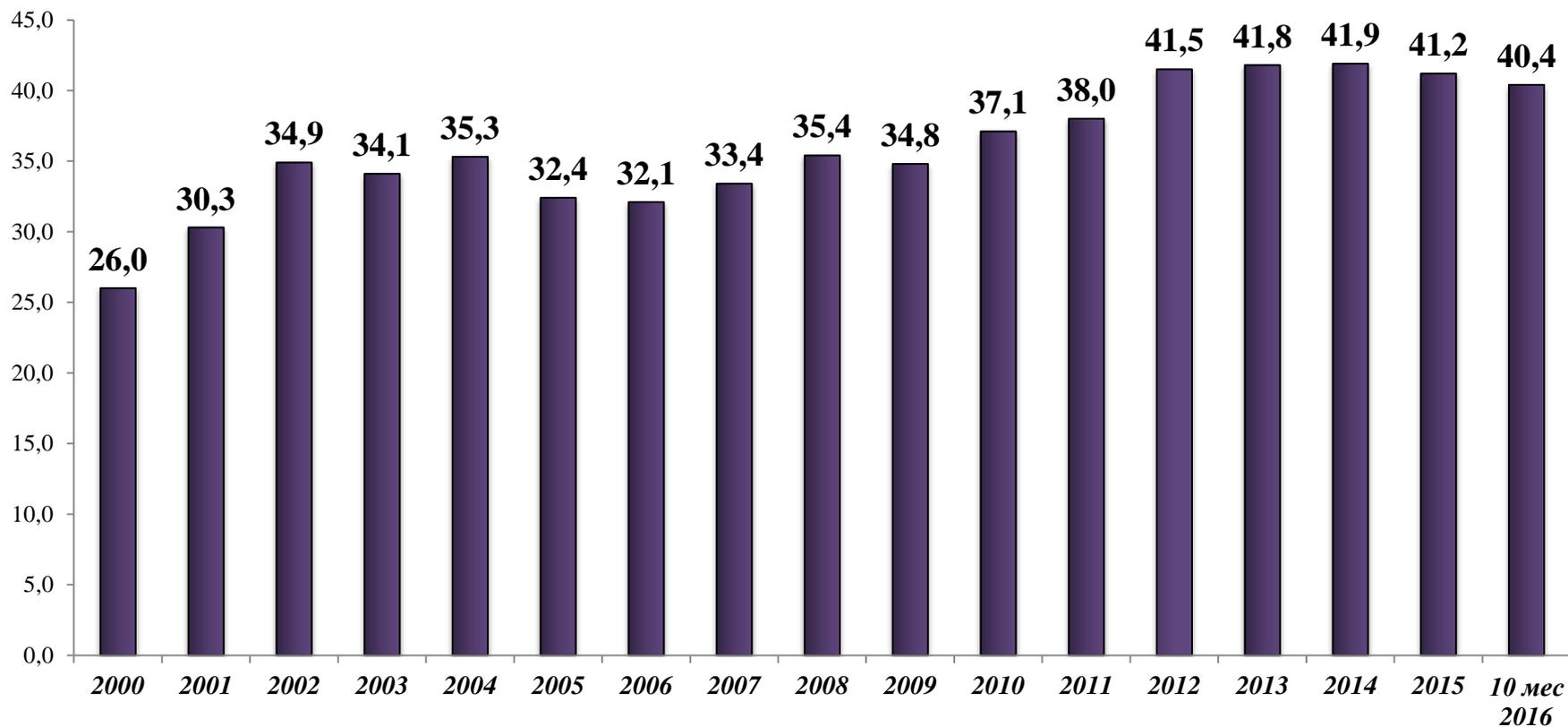
Key transmission routes in St. Petersburg in 2004 – 2016 (among those with the route known), %



Specific features of the HIV epidemic in St. Petersburg

- ✓ Prevalence shifts towards older age groups (30-39 and 40-49 years old)
- ✓ Dominance of the sexual transmission routes over the parenteral route
- ✓ High frequency of HIV diagnosis among migrants (domestic and international) – over 30% among newly diagnosed cases
- ✓ **Increasingly more women are involved in the epidemic (sexual transmission route)**
- ✓ The epidemic spreads out of risk groups (IDUs, CSWs, MSM) to penetrate general population of the city

Women in the HIV epidemic in St. Petersburg

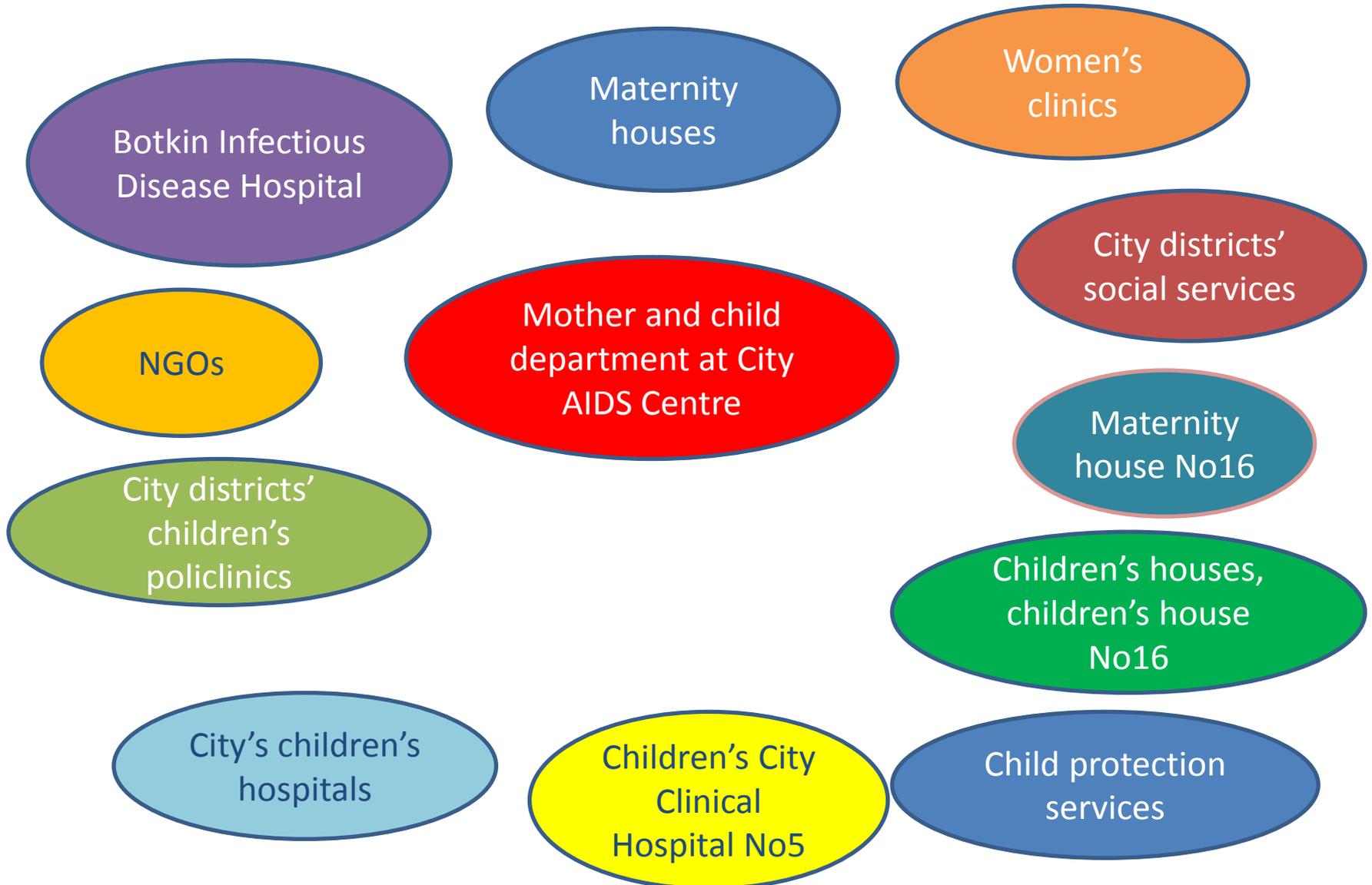


Share of women in the structure of PLWHs

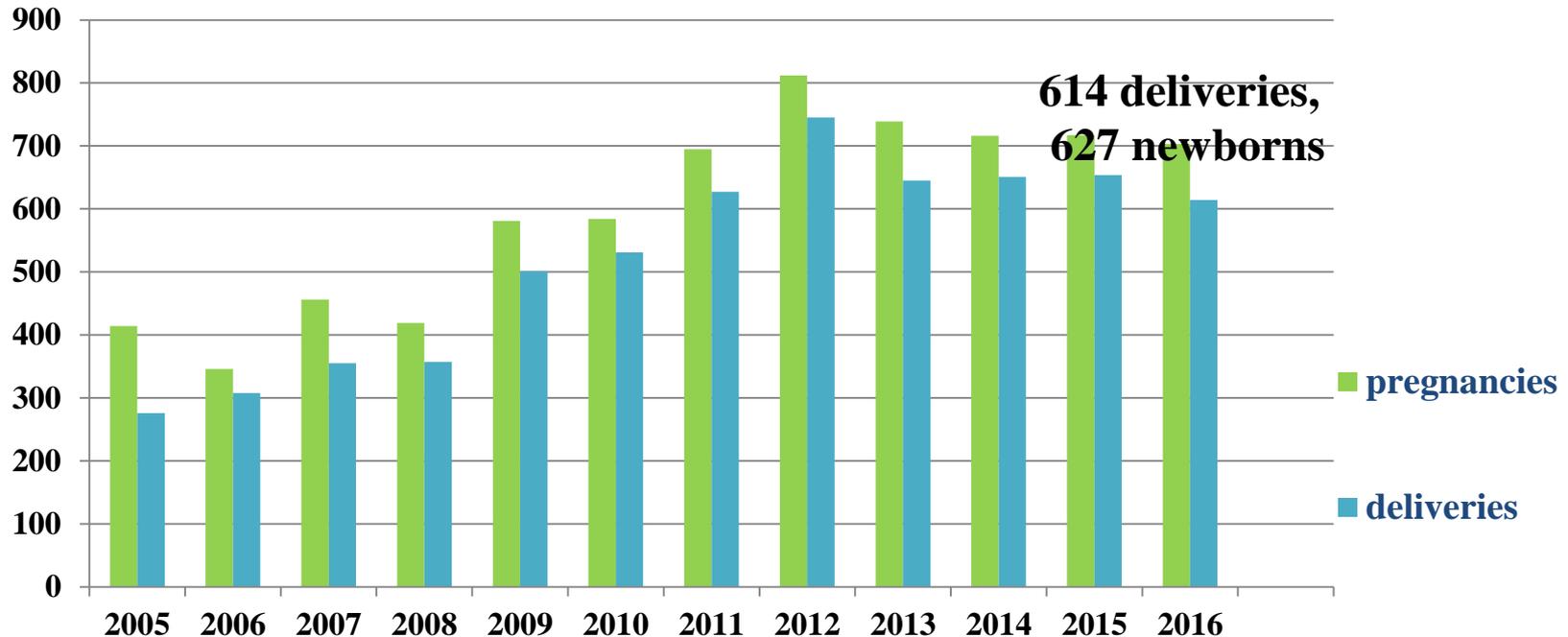
HIV prevalence in St. Petersburg, 2015

Age	2015					
	Males		Females		Total	
	Number of PLWHs	Prevalence per 100,000 in this group	Number of PLWHs	Prevalence per 100,000 in this group	Number of PLWHs	Prevalence per 100,000 in this group
0-14	159	48,1	171	54,8	330	51,4
15-17	9	16,9	12	23,8	21	20,2
18-19	14	28,8	33	69,1	47	48,8
20-29	2026	447,5	2501	571,9	4527	508,6
30-39	14516	3488,3	8430	1992,3	22946	2734,1
40-49	6263	1867,5	2614	719,4	8877	1270,5
50-59	1608	497,4	853	195,6	2461	324,1
60-69	482	226,3	269	76,7	751	133,2
Over 70	76	49,2	40	10,4	116	21,6
Total	25153	1080,7	14923	532,1	40076	780,9

Collaboration between medical and non-medical organisations in ensuring support and care to HIV+ women and their children



Steady number of pregnancies and deliveries with HIV+ women



- HIV prevalence among pregnant women was 0,9 % (2016)
- Most pregnancies were wanted (82%)
- In 2016, in the structure of maternal mortality 36% were among HIV+ women (2015 – 21%, 2014 – 31%, 2013 -38%)

Gynecological and obstetric care to HIV+ women at the St. Petersburg AIDS Centre

In the interval period

- **Family planning consultations and prevention of HIV MTCT**
- **Provision of contraceptives**
- **Diagnostics of reproductive system diseases (ultrasound, mammography, digital colposcopy, cytological examinations)**
- **Diagnostics of STIs**

During pregnancy

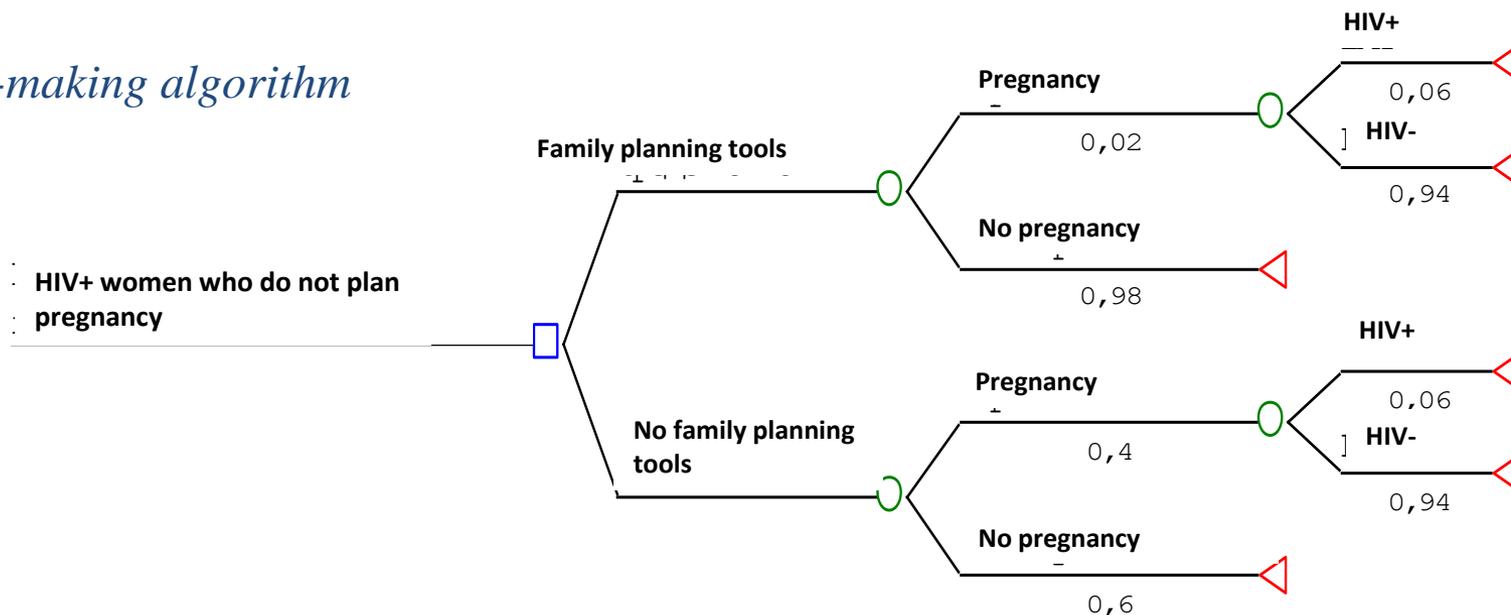
- **Diagnosis and stage of HIV**
- **Prevention of vertical infection (infectionists, obstetricians and gynecologists, medical psychologists, social workers, NGOs)**
- **Recommendations on method of child delivery**

Economic assessment of family planning effectiveness with HIV+ women aimed at reduction of MTCT risks

$NNT^* = 1 / (\text{probability of pregnancy within a year} - \text{probability of pregnancy with the use of family planning tools}) = 1 / (0,4 - 0,02) = 2,63$

* NNT (number needed to treat) — number of HIV+ women who should be provided with family planning tools for prevention of 1 case of pregnancy

Decision-making algorithm

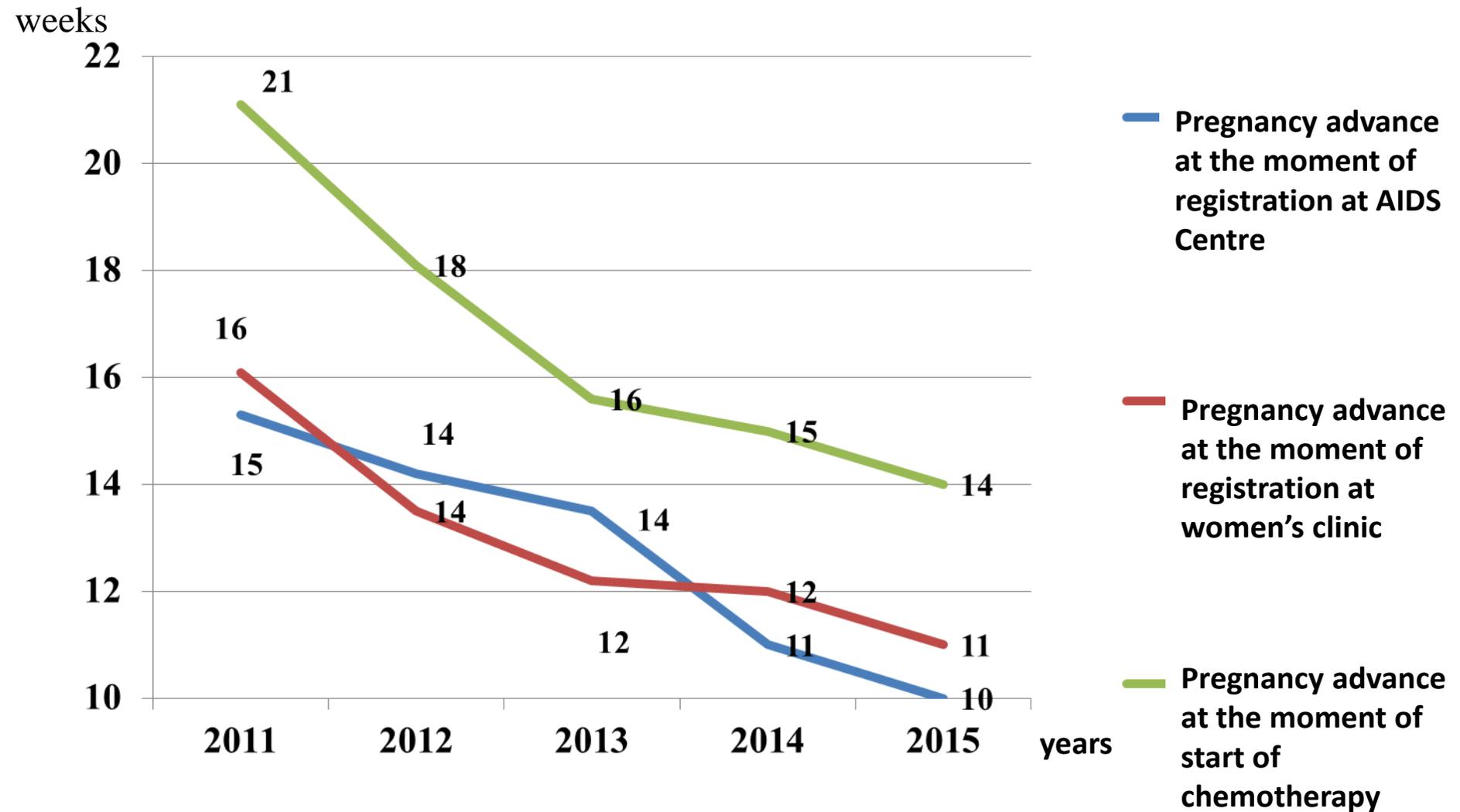


Economic benefit from implementation of the family planning programme: 18 RUB extra per 1 RUB of budget investments

Working with patients

- School for patients
- School for pregnant women
- School for HIV+ adolescents

The earlier in pregnancy a women is placed on pregnancy records at the women's clinic and AIDS Centre, the earlier the chemotherapy can be started



Starting from 2016, HIV prevention is part of the 2015-2020
Healthcare Development in St. Petersburg Programme

Funding in 2016 was RUB 585 091 200

Coverage of pregnant women, parturients and newborns with chemotherapy

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Chemotherapy at the moment of pregnancy	73,0	71,8	83,1	79,3	76,7	74,4	80,1	84,0	86,5	89,4	91,2	92,2
Chemotherapy in labours	98,0	96,0	98,0	94,4	95,8	88,7	90,3	91,8	92,1	89,7	95,3	94,1
Chemotherapy to newborns	99,0	99,7	99,8	98,6	99,6	99,1	99,5	99,4	99,3	99,2	99,4	99,4
3-stage chemotherapy	73,0	71,0	82,0	78,1	76,4	72,5	80,0	80,0	85,9	87,4	90,1	91,5

In 2016, the funds of the city programme on HIV prevention in 2015-2018 were used to purchase :

- Formula milk – 2,850,000 RUB
- Contraception – 1,200,000 RUB

Free-of-charge chemotherapy to domestic and foreign migrants

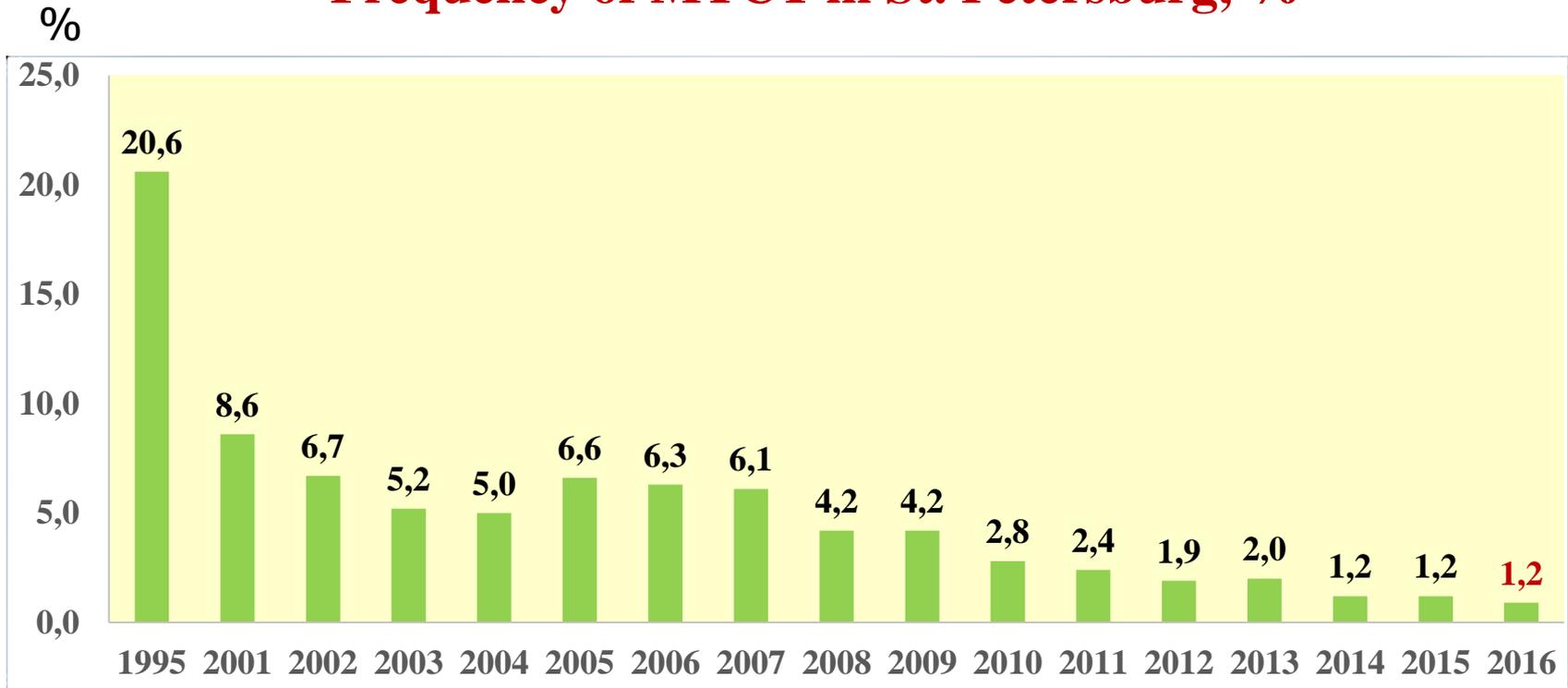


Increasingly more women start chemotherapy in recommended time, n=1923

	Number of pregnant women, n (%)			Total
	2014	2015	2016	
Start of HAARV therapy before pregnancy	108 (16,5%)	161 (24,6%)	202 (32,9%)	73,6% in 2014 and 92,2% in 2016
Start of HAARV therapy in the 1st trimester	117 (17,9%)	134 (20,5%)	89 (14,5%)	
Start of HAARV therapy in the 2nd trimester	257 (39,2%)	247 (37,8%)	250 (40,7%)	
Late start of the chemotherapy	173 (26,4%)	112 (17,1%)	25 (4,1%)	

83% of women had undetectable VL before labours

Frequency of MTCT in St. Petersburg, %



Over the years of HIV registration, total number of children the HIV+ women gave birth to	8060
Children under monitoring due to HIV prenatal contact	1289
HIV+ children on records	376

HIV+ children

On records at AIDS Centre – 376

Infected by mothers – 366

Of whom 70 were infected in breast-feeding

ARVT receivers – 360

Causes for for ARVT failure:

- 2 children in search
- 3 families dodge treatment

(for two cases court proceedings started)

Identification of HIV+ children in 2016

- Examined with PCR – 98% of children
- Diagnosed – 19
- Mother-to-child transmission – 17
- Infected through breast-feeding – 4

8 children born in 2016 were HIV-diagnosed:

- Refusal from chemotherapy - 3
- No pregnancy monitoring - 2
- Breast feeding - 3

Examination of husbands/partners for HIV at women's clinics – a possibility to reduce infection of pregnant and breast-feeding women through sex and of mother-to-child transmission

- Out of 423 children at St. Petersburg AIDS Centre, 70 were infected through breast-feeding
- In 61% of cases – infection of a woman in the third trimester or in the period of breast-feeding with negative HIV test results during the pregnancy
- In 2015, 8 children were identified who had been infected through breast-feeding in different years in Russia, and in 2016 – 4 children

Resources for reduction of MTCT

- It is advisable to test for HIV antibodies:
 1. Partners of all women on records at women's clinics due to pregnancy

Decree by Chief Sanitary Doctor of Russia of 21.07.2016

N 95 "Changes to the Sanitary Rule 3.1.5.2826-10 "HIV Prevention»

Clinical Guidelines. Use of ARVT as prevention of MTCT, 2017

Implementation of proposals in regional regulatory frameworks, 2017

- Information letter of St. Petersburg Healthcare Committee “**Measures for MTCT Prevention**” to the managers of women’s clinics, obstetric clinics, children’s polyclinics and hospitals
- Draft of Decree by St. Petersburg Healthcare Committee “**Prevention of HIV MTCT**”

Regulations of denials from treating HIV+ children

- In 2016, two families were deprived of parental rights due to refusal to treat their children
- In one case the court obliged parents to treat and have their child monitored
- In 5 cases the problem of starting/continuing ARVT was settled with the help of child protection services

Key areas of work in 2017

- Organisation of HIV testing for husbands/partners at registration of women at women's clinics due to pregnancy
- Legal assessment of parents' refusal from chemotherapy in pregnancy, labours and to newborns, particularly in diagnosed MTCT
- Training for the child protection services on HIV-and-children issues
- Case management for adolescents in moving to adults wards
- Reduction of biological orphanage (management for mothers in adherence to monitoring and ARVT at each child's visit to the AIDS Centre's pediatrician)

Thank you for your attention!