

**A regional approach to prevention  
of HIV mother-to-child  
transmission in Odessa, Ukraine**

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# The problem of HIV in Ukraine

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- Ukraine has the highest rate of HIV infection among all CEE and NIS countries - 1% of the adult population in Ukraine is HIV positive (UNAIDS data)
- The problem of HIV/AIDS was acknowledged on a high political level (participation of Ukraine in UNGASS; Declaration of the year 2002 as a year of HIV prevention; participation of Kofi Annan in Inter-Ministerial AIDS commission of Ukraine in June 2002; approval of National AIDS Program, etc.)
- Increase in number of children born from HIV-infected women was registered – from 737 in 2000 to 937 in 2001 (21%)
- The Odessa region (the city of Odessa and Odessa oblast) has the highest rate of HIV-infected pregnant women in Ukraine
- Placing a high priority on the prevention of HIV transmission from mother to child (PMTCT) (National AIDS Program)

## Project goal:

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To reorganize the system of healthcare delivery to prevent HIV transmission from mother to child and to health care professionals in Odessa oblast and to develop a model that is applicable in other regions with limited resources.

# Project success factors:

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Experience of international collaboration: participation in AIHA programs since 1992 (infection control, women's health, nursing programs, etc), PATH projects (infection control, counseling), JHPIEGO corporation (family planning and education), UNICEF (patient-friendly clinic)

Organizational structure: the hospital is a major clinical site of Odessa Medical University in obstetrics and gynecology, surgery, etc.; An Infection Control Committee was organized; Women's Wellness Center was opened in 1998; Family Planning Center (1996) , Neonatal Resuscitation Training Center (1998)

# PMTCT project approach:

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Early detection of HIV-positive pregnant women (pre- and post- testing counseling, diagnosis of HIV infection, early prenatal care).

Referral of HIV-positive pregnant women to the Women's Wellness Center (located on the premises of Odessa Oblast Hospital) for prenatal care and subsequent delivery in the Oblast maternity hospital.

Follow-up of HIV-infected women, their children and families within a model of family medicine (development of multi-disciplinary teams— family physician, pediatrician, gynecologist, immunologist, psychologist, social worker).

# Preliminary clinical results of the project:

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50% increase in number of non-infected children born from HIV+ women with a tendency of increase after confirmation by ELISA tests at the age of 18 months (mother-to-child transmission rate - 12% in the project group, 24% - in comparison group (CG)).

## PRENATAL CARE:

- 100% of HIV+ pregnant women registered for prenatal care during the 1<sup>st</sup> and the 2<sup>nd</sup> trimester (66% in CG)
- 100% of HIV+ pregnant women knew their HIV status before the delivery (56% in CG)
- 100% went through pre- and post- testing counseling (40% in CG)
- 95% received vitamin A, iron, folic acid (42% in CG)

## DELIVERY:

- 100% received ARV therapy before and/or during delivery (2% in CG)
- 50% - C- section (90% planned) ( in CG -10%, - 70% planned)
- During vaginal delivery in 93% of cases birth canal cleansing was performed (in 76% in CG), in 10% - episiotomy (20% in CG)
- In 100% - amniotic fluid-free period was less than 4 hours (56% in CG)

# Preliminary clinical results of the project:

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## POSTNATAL CARE AND FOLLOW-UP:

100% of newborns received ARV therapy (2% in CG)

100% of newborns received replacement feeding (97% in CG)

90% of newborns had normal development (76% in CG)

100% of mothers received counseling in newborn care and feeding issues (92% in CG)

92.5 % of mothers received counseling on family planning issues (50% in CG)

# Major project achievements:

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Medical workers' levels of skills and knowledge on HIV and PMTCT were assessed.

The Oblast Health Administration issued the decree on referring all HIV+ pregnant women to the WWC and Oblast maternity hospital, and is conducting training sessions on PMTCT for medical workers of Odessa oblast.

The curriculum for post-graduate education on PMTCT for medical workers was developed and a 2-week training session for medical professionals of Odessa and 8 regions of Odessa oblast was organized.

Organizational schemes of HIV+ pregnant women referral and health care delivery were developed.

A catalogue of documents was developed: practical guides on PMTCT during delivery, prenatal care for HIV+ pregnant woman, treatment of STIs, nutrition for children born from HIV+ women, pediatric care, etc (10 altogether); patients' charts; and patient education materials.



# Major project achievements:

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Data base on monitoring and evaluation project's activity was developed (the indicators were determined in accordance with the recommendations of WHO and UNAIDS for the regions with limited resources)

5 abstracts and 6 articles on project results were published in the materials of the XIV International AIDS Conference (Barcelona, July 2002); 5 poster presentations were prepared for this conference

A proposal was written and submitted to Glaser's Pediatric Foundation on organizing Training Center on PMTCT for training medical professionals

The program on clinical training of medical professionals has started in Denver

# Future project directions:

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Continue training of medical professionals on PMTCT

Develop a system of continuous follow-up care for HIV-infected children and families

Improve the system of healthcare delivery to HIV-positive pregnant women and their children.

Develop PMTCT management models in a healthcare system with limited resources.

Disseminate the experience of the Odessa project's activities in other regions of Ukraine and other NIS countries with the support of oblast administrations and Ministries of Health.