



90-90-90 Targets Workshop

July 22-23, 2017 • Paris

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Using Nurse-Led, Home-Based HIV Care to Improve Adherence and Retention in Care among People Who Inject Drugs

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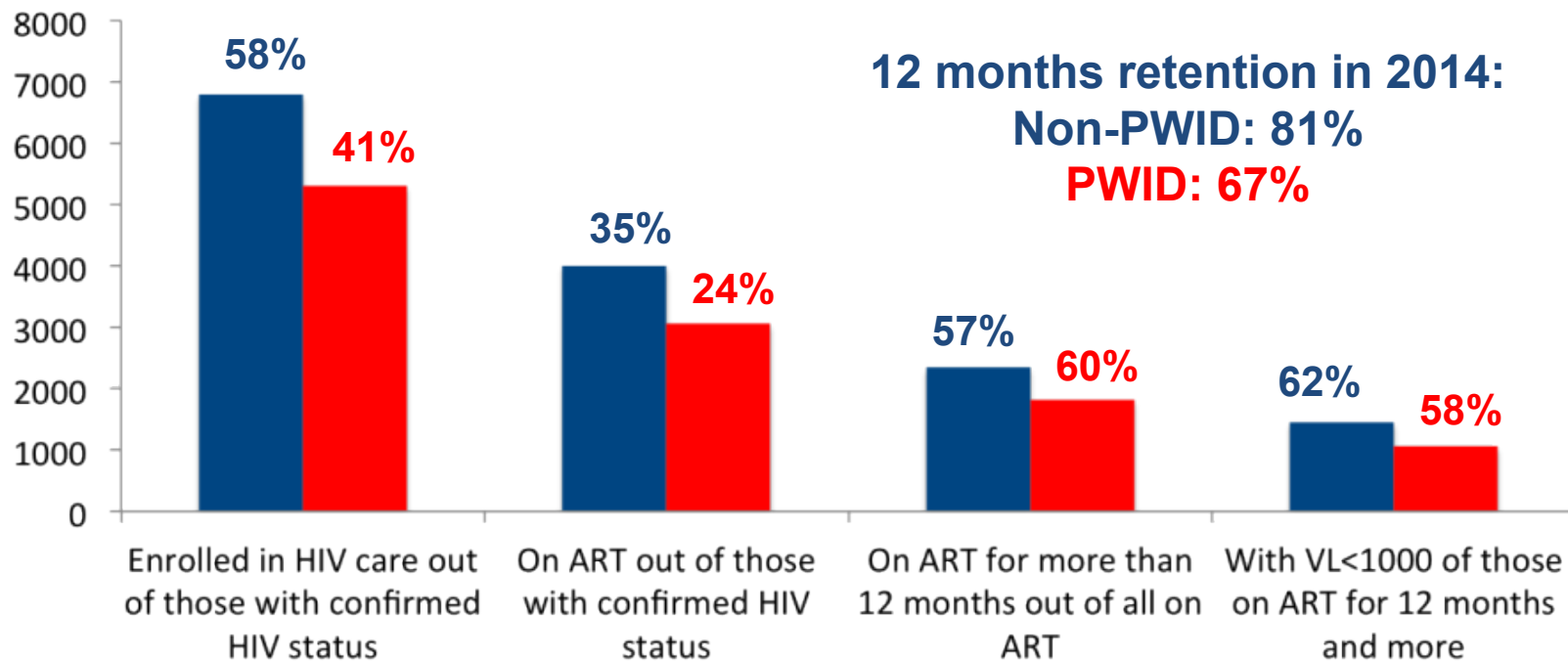
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Background

- Central Asia has one of the fastest growing HIV epidemic in the world.
- People who inject drugs (PWID) account for the majority of all people living with HIV (PLHIV)
- PWID face a range of barriers to accessing and staying in HIV care, including stigma and discrimination, a lack of family support, and health care-related costs
- Central Asian health care systems are dominated by physicians with nurses having limited responsibilities in patient care

HIV care cascade for PLHIV who inject and do not inject drugs in Kazakhstan, Kyrgyzstan and Tajikistan, 2014



Home-based clinical care for PLHIV

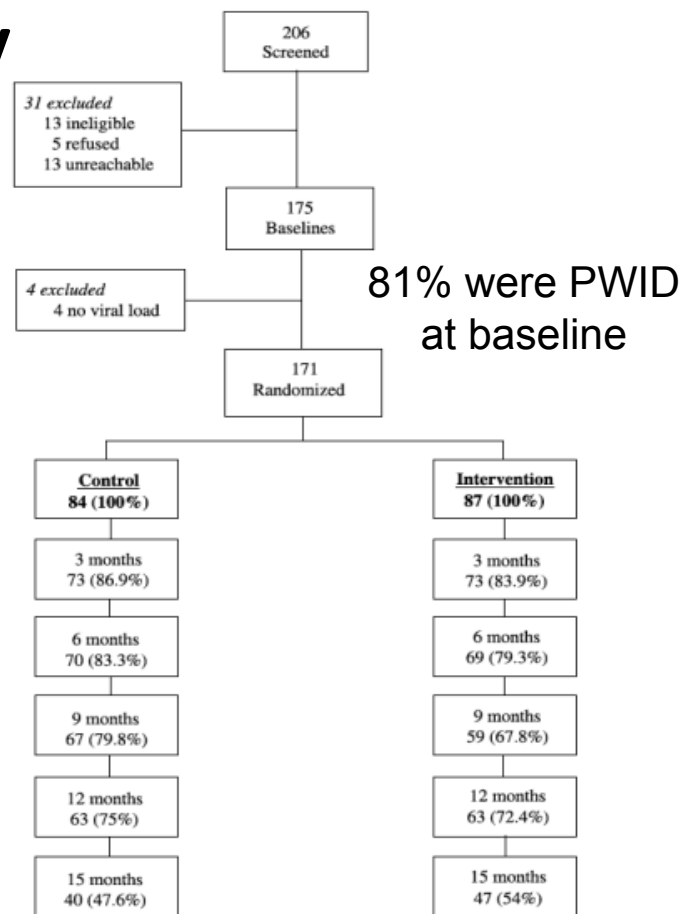
- Home-based nursing intervention improves adherence to ART among HIV-positive children (Berrien et al, 2004)
- Nurses-led home-based HIV treatment is effective for prevention of virologic failure, mortality and other adverse events among PLHIV in rural, resource-poor and high HIV prevalent settings (Brust et al, 2012; Jaffar et al, 2009).
- Home-based ART was associated with multiple positive social outcomes (family & community support, strengthening of relationship with intimate partners) (Apondi et al, 2007)

ATHENA study

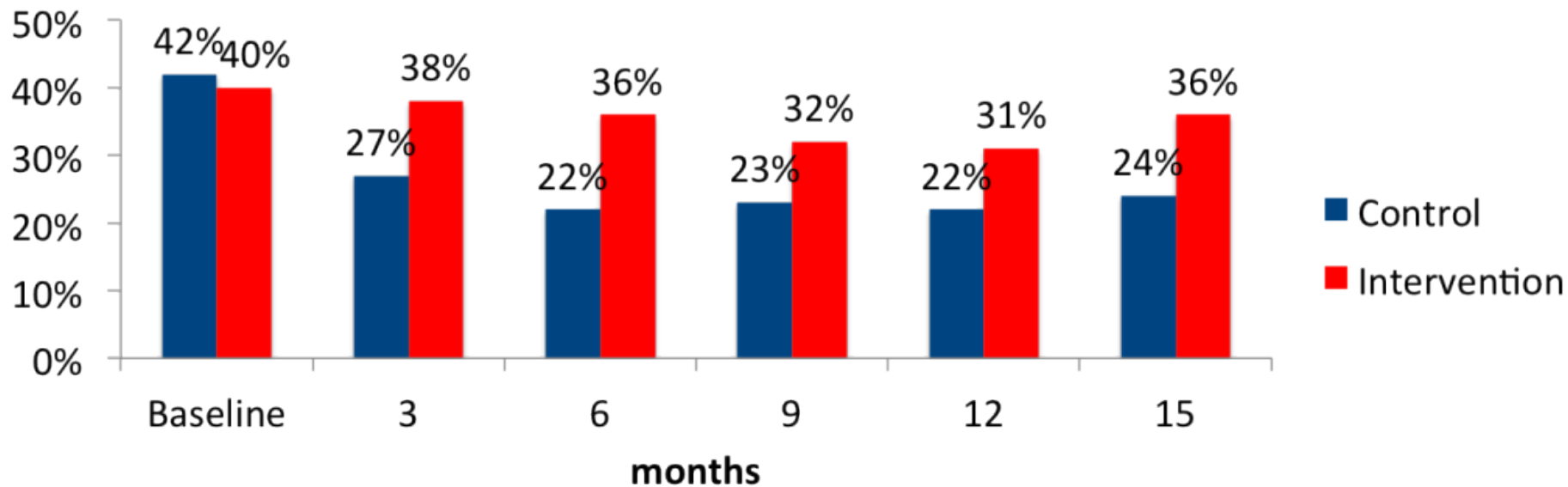
2-arm, randomized, controlled trial conducted between September 1999 and January 2002 in the US.

The intervention team consisted of a nurse and a community support worker who made a series of home visits, on a schedule of declining frequency over a period of 12 months

The measure of adherence was the data provided by the MEMS cap and VL results



Proportion of subjects with $\geq 90\%$ adherence (data from MEMS caps, ATHENA study)



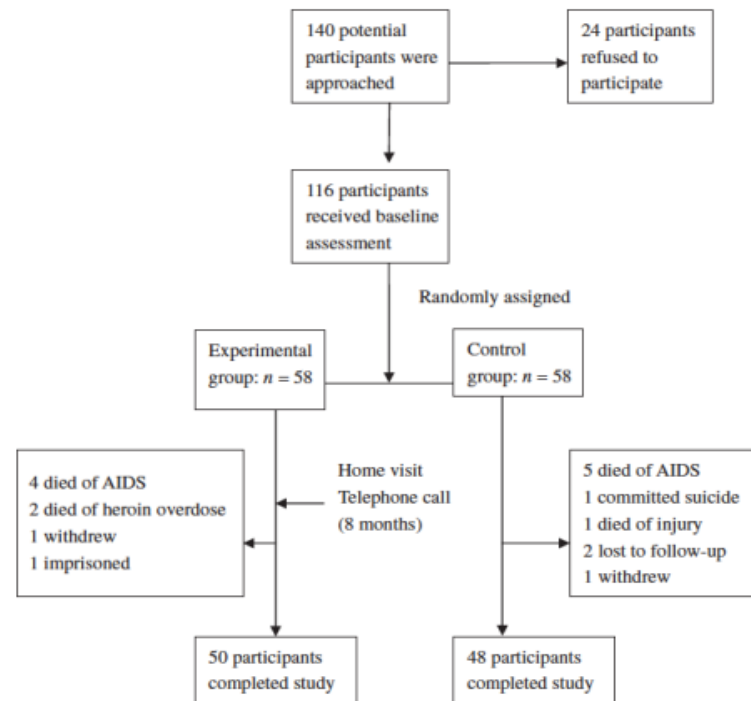
Nurse-delivered home visits to heroin users in China

Randomized trial and pre- and post-intervention tests conducted between July 2007 – August 2008 in Hunan province, China

Home visits by nurses were conducted every 2 months + telephone calls every 2 weeks

Adherence was measured using ART self-report

Data were obtained at baseline and eight months.



ART adherence and quality of life

- Participants in the experimental group were more likely to report taking 100% of pills (Fisher's exact = 14.3, $p = 0.0001$) and taking pills on time (Fisher's exact = 18.64, $p = 0.0001$).
- There were significant effects of the intervention in physical ($F = 10.47$, $p = 0.002$), psychological ($F = 9.41$, $p = 0.003$), social ($F = 4.09$, $p = 0.046$) and environmental ($F = 4.80$, $p = 0.031$) domains of WHOQOL and depression ($F = 5.58$, $p = 0.02$).

Wang et al.,2010

ICAP Home Visiting Nurses Program in Central Asia



Core project approaches

- Target the most at-risk patients for home-based care
- Embrace a holistic view of adherence barriers and identifying treatment supporters
- Provide an entry-point for comprehensive care
- Utilize task shifting approach
- Ensure robust supervision of home visiting nurses

Services provided by home visiting nurses

- ART adherence counseling and monitoring
- Deliver ARVs
- Remind patients about their scheduled clinical visits, laboratory tests and ARVs refills
- TB and STI symptoms screening
- Provide information on nutrition
- Refer patient to the methadone therapy programs and other health services
- Conduct counseling of sexual partners and invite them for HIV testing.
- Counsel on HIV prevention methods

ART initiation and adherence

Indicator	Dec 31, 2014		May 31, 2017		<i>p</i>
	N	%	N	%	
Number of PWID diagnosed with HIV	4943	-	5194	-	
LTFU (did not receive any services for the past 6 months) out of those diagnosed	3251	66%	2786	54%	<0.001
On ART out of those diagnosed	1021	21%	1790	34%	<0.001
12 m retention on ART	242	69%	363	83%	<0.001
Tested for VL out of those on ART	618	61%	1592	89%	<0.001
With VL<1000 of those tested for VL	394	64%	982	62%	0.38

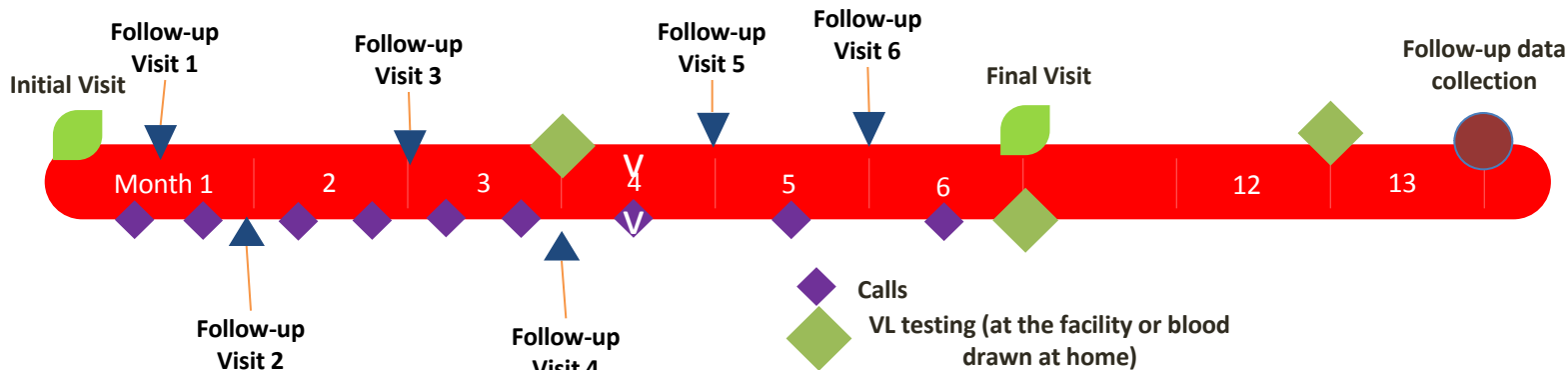
Lessons learned

- Care provided by home visiting nurses can improve patient retention in care and treatment for PWID
- Nurses need targeted training and continuous mentoring support to enable them to work with PWID effectively
- Well-functioning health facilities are needed for successful home-based care
- Close collaboration and linkages between clinical care providers and community-based adherence support services are important
- Targeted focus on patients who are already on ART but need careful monitoring is needed to improve adherence to ART

Next steps

To pilot and test a Nurse-led intervention to improve adherence and retention of PLHIV in HIV care and treatment

- PLHIV on ART for >6ms with unsuppressed viral load,
- PLHIV newly initiated on ART (on ART for <3 months)
- emphasis on intervention fidelity
- development and introduction of an electronic tool for home visiting nurses mentoring and monitoring.



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