

Treatment adherence

Treatment adherence is more difficult in children than in adults:

- suitable administration form.
- dosages change because increasing age means increasing weight.
- age stages (puberty).
- dependence on parents / carers.

A lot of studies on adherence about:

- adherence support through sms services
- peergroups
- social support
- education
- meme caps

ADULT STUDIES

...the Failure Intervention Program (Jan 2009) ... the Rewarding Program (Jan 2009) ... the Adult Treatment group (2007)



Conclusion

- By adding The Failure Program and the Rewarding Program, there are almost no detectable children.
- It is possible by positive rewards to encourage compliance.
- Less intervention needed (Child Protect Service, hospitalizations and home care).
- Prolonged undetectable viral loads (up to 6 years).

Topics:

- Short introduction.
- Adherence by HIV infected children.
- Study.
- Future plans.



After van der Plas (Medicine, the Scientist, Academic Medical Center Amsterdam) - The Mother Earth

Jan-Feb December 2011

AD	20%
AD+RD	20%
AD+RD+FP	20%
AD+RD+FP+RW	20%
AD+RD+FP+RW+AS	20%

January 2009-2010

AD	20%
AD+RD	20%
AD+RD+FP	20%
AD+RD+FP+RW	20%
AD+RD+FP+RW+AS	20%

...the Failure Intervention Program (Jan 2009) ... the Rewarding Program (Jan 2009) ... the Adult Treatment group (2007)

Effect of different intervention programs on treatment adherence of HIV infected children (this study has been published in AidsCare Jan. 2013).

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Comparison of adherence support through sms services and peer groups in HIV infected children (2012)

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After van der Plas (Medicine, the University of Groningen, Groningen, The Netherlands)

Jan-Feb
December 2011

Adherence	91%
Child Protection Service	0%
Hospitalizations	0%
Home care	0%
Undetectable viral loads	91%

Nov-Dec
2009-2010

Adherence	91%
Child Protection Service	0%
Hospitalizations	0%
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Undetectable viral loads	91%

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Topics:

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- **Atie van der Plas**
- **Pediatric hiv
consultant**
- **Academic
Medical Center**
- **Amsterdam**
- **The Netherlands**



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-adherence
-peer group
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-memory capacity

ADULT STUDY



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- adherence support through sms services
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ADULT STUDIES

children

ge means

*Treatment adherence
program
pediatric HIV – AMC*

1. The Failure Intervention Program (jan.2004)
2. The Reward Program (jan. 2007)



Adherence



Hiv infected children



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Rewarding protocol



Adherence



www.shutterstock.com · 67137319

Rewarding protocol



Hiv infected children

Study:

The effects of different intervention programs on treatment adherence of hiv infected children.

- included 31 children.
- retrospective.
- 3 time periods
 - * 2000-2004
 - * 2004-2006
 - * 2006-2009
- all vertical transmitted
- 87 % black
- 61 % female
- 39 % man
- 45 % single parent
- 16 % family care
- 13 % foster homes
- 3% adopted
- 16 % passed away

Baseline December 2003

Actual 2003 December 2003

-DOT	26 %
-Hospitalizations	29 %
-Child Protection Services	23 %
-special school for children with a chronic illness	26 %
-Once daily treatment regime	0 %

January 2004-2006

-Failure Intervention Program	61 %
-DOT	23 %
-Hospitalization	0 %
-Child Protection Services	39 %
-Special school for children	35 %
-Once daily treatment regime	65 %

Baseline December 2003

Januari 2007-Desember 2009

- Record program	58 %
- Follow interview program	25 %
- DOT	3 %
- Hospitalization	19 %
- Child Protection Service	19 %
- Special school	26 %
- Once daily regimen	0 %

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Januari 2007-December 2009

- Reward program	58 %
- Failure intervention program	23 %
- DOT	3 %
- Hospitalization	0 %
- Child Protection Service	19 %
- Special school	26 %
- Once daily regiment	81 %

Measurements

- HIV viral loads.
- CD4 counts.
- cART drug levels.
- Disclosure age.
- Responsibility for the medication.

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Limitations

- small number of children in this study.
- the influence of age at adherence.
- therapy has become less intensive.
- social factors are important in explaining non-adherence.
- we can not establish whether the Reward Program it self's promote adherence or because it is added to the failure intervention Program.

To read the article:

**AIDS Care: Psychological and Socio-medical Aspects of
AIDS/HIV**

Volume 25, Issue 6, 2013

Future plans

- **Collaboration with the other 3 hiv child-centers in The Netherlands**
- **Together we start the 'BRAVO' study(Boosting Adherence in hiv infected children by a reward: a different view on the treatment of hiv infected children) in January 2015.**
- **For a period of 3 years.**



Thanks to:

- **Annouschka Weijsenfeld**
- **Linda van der Knaap**
- **Eline Visser**
- **Nike Nauta**
- **Hannie de Jong**
- **Riet Albers**

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