

# Use and availability of children's ARVs WHO 2007 - 2008

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# Content

Data on distribution and composition of paediatric ART regimens reported to be used in resource-limited countries – WHO survey 2007

Up-date on availability and current development of ARV formulations by pharmaceutical companies as of early April 2008

# Distribution and composition of paediatric ART regimens

Survey conducted by AMDS to characterise adult and children ARV use in July-September 2007

Questionnaire sent to 41 countries: 30 responded (73%),

Total number of patients: 1,265,000 patients (63% of total number of patients on treatment in Dec. 2006)

Adults 93%

Children 7%

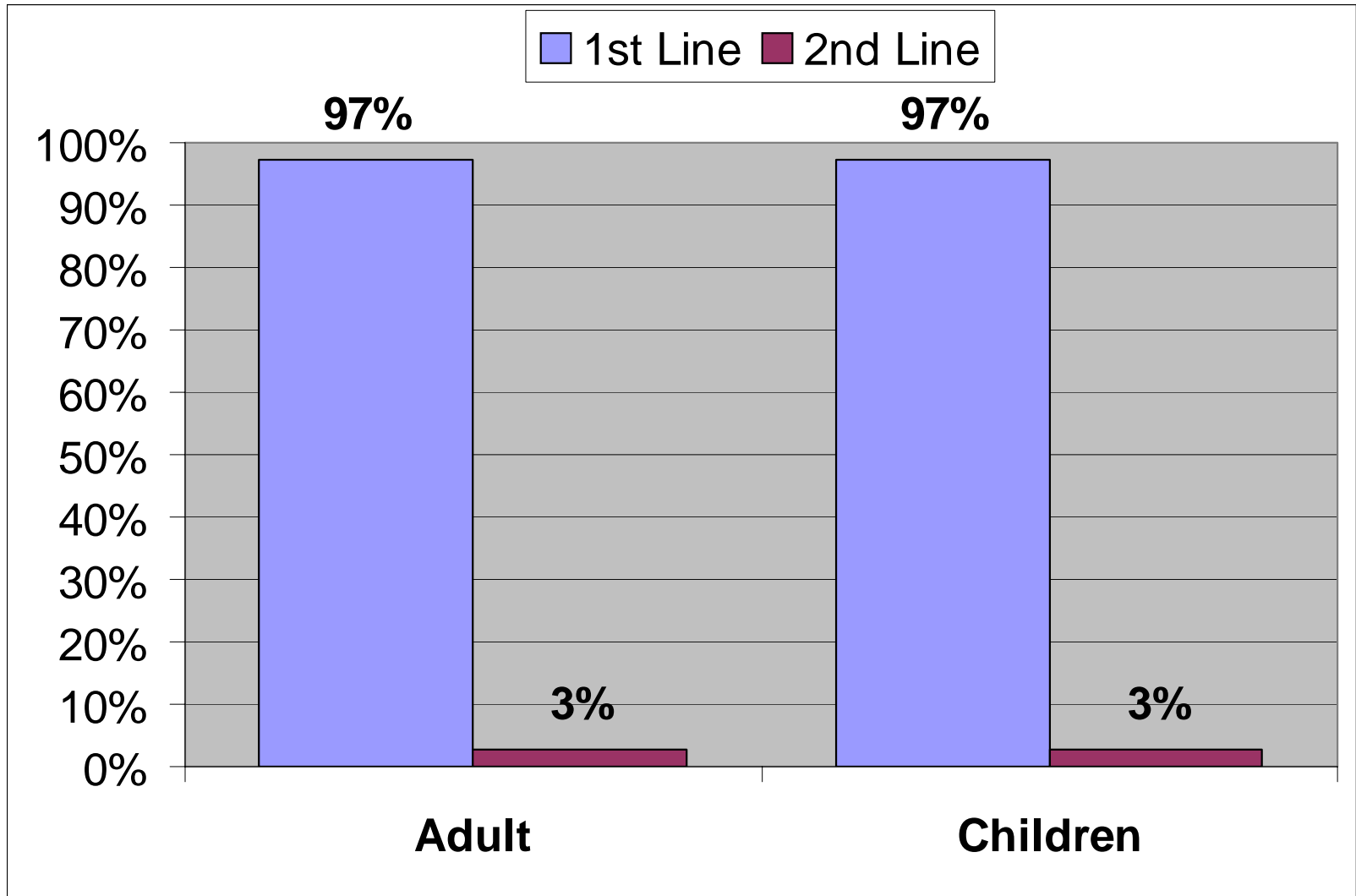
# 24 countries responded on paediatric use

- Benin
- Botswana
- Burkina Faso
- Burundi
- Cambodia
- Cameroon
- China
- Cote d'Ivoire
- Ethiopia
- Guyana
- India
- Kenya
- Lesotho
- Malawi
- Mali
- Mozambique
- Namibia
- Nigeria
- Peru
- Russian Fed.
- Rwanda
- Swaziland
- Tanzania
- Thailand
- Uganda
- Ukraine
- Vietnam
- Zambia
- Zimbabwe

S 2

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i assume you will say this  
Crowley, 2008-04-09

# Percentage of adults and children on 1st and 2<sup>nd</sup> line regimens



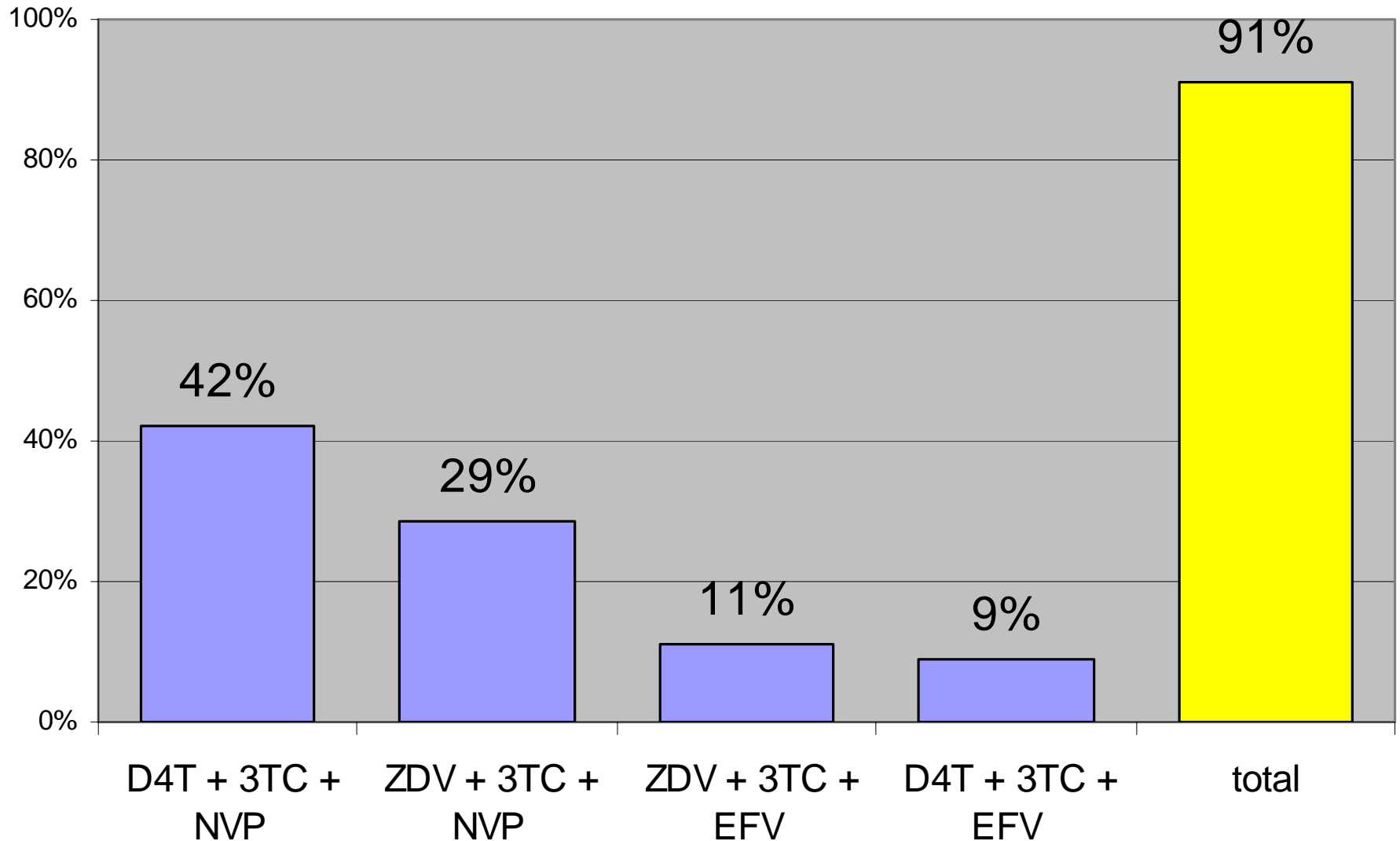
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& of children on FLT and SLT not use word under

Crowley, 2008-04-09

# Distribution of first line regimens in children



## Most frequently used 2nd line regimens in children

ZDV + 3TC + LPV-r	488	24%
<b>ABC + ddI + LPV-r</b>	<b>247</b>	<b>12%</b>
D4T + ddI + LPV-r	171	8%
D4T + 3TC + LPV-r	138	7%
<b>ZDV + ddI + LPV-r</b>	<b>104</b>	<b>5%</b>
3TC + ddI + LPV-r	80	4%
<b>ABC + ddI + NFV</b>	<b>52</b>	<b>3%</b>

But numbers are very small...

# Future

24 out of 30 countries intended to revise their national treatment guidelines by the end of 2007 (80%)

Factors that key informants mentioned as influencing future practice:

- Drug resistance and testing (9 countries)

- Human resources and training for physicians and nurses (9 countries)

- Cost and generic versions (6 countries)

- ARV shortages, availability or supply chain issues (5 countries)

- New drugs or evidence on new regimens (5 countries)

- International information on side effects and regimen choice (5 countries)

# Availability and current development of ARV formulations – Update April 2008

Information collected from innovator and generic ARV producers: February – early April 2008

Other sources of information:

- WHO List of Prequalified medicinal products ([http://www.who.int/prequal/lists/hiv\\_suppliers.pdf](http://www.who.int/prequal/lists/hiv_suppliers.pdf))
- Global Fund List of ARV pharmaceutical products classified according to quality assurance policy for single and limited source pharmaceutical products ([http://www.theglobalfund.org/pdf/guidelines/List\\_HIV-AIDS.pdf](http://www.theglobalfund.org/pdf/guidelines/List_HIV-AIDS.pdf))

Reference document:

- Report of the WHO Paediatric Antiretroviral Working Group 2007 "Preferred antiretroviral medicines for treating and preventing HIV infection in younger children", WHO, 2007

# Evolving market for formulations with ideal dosing strengths

- Generic companies producing 1st line FDCs tablets:
  - ZDV/3TC/NVP 60/30/50mg\*
  - ZDV/3TC 60/30mg\*
  - d4T/3TC/NVP 6/30/50mg\*
  - d4T/3TC 6/30 mg
- Brand-name and generic companies producing 2<sup>nd</sup> line tablets:
  - ABC 60mg
  - ddl 125 and 200mg
  - LPV/r 100/25mg
- Status of pre-qualification often not yet completed - work in progress
- FDC with \* encouraged for submission to WHO model EML for children

## ARV pediatric formulations with other dosing strengths

- Oral solutions included in the WHO EML: available from various producers; many are pre-qualified
- NRTIs, NRRTIs and PIs tablets: strengths available from both brand-name and generic companies; PQ status mixed

# Pediatric treatment costs

## First line ART:

- Prices come down rapidly with FDCs  
d4T/3TC/NVP 6/30/50mg : \$15 (infant 5kg) to \$29 (infant 10kg) patient year
- Liquid forms are still at high prices:  
d4T/3TC/NVP liquid: \$ 141 (infant 5 kg)
- Future: FDCs under PQ/development will offer more options at low prices (ZDV/3TC/NVP, ZDV/3TC/ABC).  
Level of prices?

## Second Line ART

- Prices remain higher, especially protease inhibitors, ZDV/3TC/LPV/r liquid: \$286 (infant 5kg) to \$383 (infant 10kg) patient year
- New solid formulations available or under development
- Will it enable prices to go down and rapidly ?