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Tablets are more acceptable and give fewer problems than syrups among young HIV-infected children in resource-limited settings in the ARROW trial.

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BACKGROUND

The provision of anti-retrovirals (ARVs) for children is complicated by syrup formulations which in comparison to tablets are:

- More expensive
- Harder to transport
- Harder to store
- More difficult for carers to administer

Additional problems with syrups include palatability and large volumes, which increase with age, as well as the lack of fixed dose combinations so each agent must be administered separately

Provided correct doses can be given, tablets are often more appropriate for children in resource-limited settings.

We studied the acceptability of syrup and scored tablet ARVs dosed according to WHO weight bands among children substituting syrups with tablets.

METHODS

ARROW is an ongoing randomised trial of paediatric ARV monitoring and treatment strategies. 1207 children aged 3 months to 17 years enrolled in Uganda/Zimbabwe during 2007/08.

At enrolment 34% (406/1207) children received syrups of individual drugs (NNRTI + 2 or 3 of ZDV, ABC, 3TC).

Of those starting syrups, 58% (236/406) children substituted scored tablets based on WHO weight band dosing tables between May 2008 and December 2009. This was encouraged for children around 3 years of age (according to WHO tables).

At time of substitution, baseline questionnaires were administered to carers to elicit their experience with syrups and expectations of tablets.

Eight weeks later, follow-up questionnaires asked for their experience with tablets.

RESULTS

79% (186/236) of questionnaires from children changing formulation were analysed

- 17 children on tablets <8 weeks were excluded
- 15 and 18 questionnaires were not completed at baseline or at follow-up respectively

Median age of children at the time of change in formulation was 2.9 years (IQR 2.4, 3.4)

At baseline, 77% (144/186) carers reported problems while using syrups, because of:

- The number and weight of bottles of liquid
- Bottles of liquid being difficult to transport

COLLABORATORS and ACKNOWLEDGEMENTS

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RESULTS CONT'D

COMPARISON OF SYRUPS AND TABLETS DISPENSED FOR 4 WEEKS IN 11.8KG AND 12 KG CHILDREN RESPECTIVELY



Syrups



Tablets

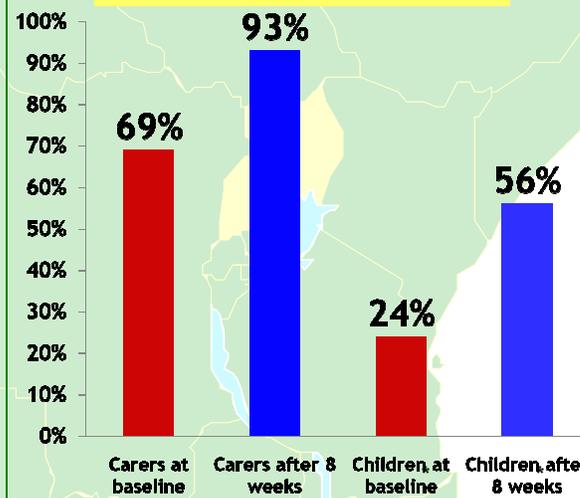


Most carers usually dissolved/crushed the scored tablets in liquid.

Specific difficulties with tablets were expected by 99(53%) carers but reported after 8 weeks by only 50(27%).

- The most frequently expected and experienced problems were taste, swallowing and vomiting.

OVERALL PREFERENCE FOR TABLETS



*Parents/carers reported the children's preferences

CONCLUSIONS

Carers anticipated fewer difficulties using scored tablets than syrups, and experienced even fewer difficulties.

After eight weeks use most carers reported that children preferred tablets; none had switched back to syrups.

These results indicate

- Scored tablets for young children cause few problems.
- Most children and almost all carers prefer tablets.
- Possible implications for aiding adherence, improving efficacy and durability of treatment, especially in paediatric pts who face potentially life-long ART

We are eliciting long term information after 24 weeks on tablets and will also evaluate affect of acceptability on adherence

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