

An analysis of diarrhoea treatments in Mongu districts following the introduction of the GRZ ORS/Zinc co-pack

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What is the GRZ¹ ORS/Zinc co-pack?



The GRZ ORS/Zinc co-pack is the government format of the commercially available Kit Yamoyo ESSENTIAL and has the same contents which are: 4 x 200 mL sachets of low osmolarity ORS, 1 x blister pack of 10 20mg Zinc Sulphate tablets. The ORS is orange-coloured and flavoured and the Zinc tablets are scored, dispersible and have an orange-flavoured coating. The co-pack also contains graphical instructions on how to use the kit. The packaging can be used to measure the water necessary to mix the ORS correctly.

The distribution of the GRZ ORS/Zinc co-pack

The GRZ ORS/Zinc co-pack was distributed by Medical Stores Limited (MSL) as part of the KYTS-ACE Project which was part of Zambia's Scaling Up Nutrition Programme (SUN). From Jan-16 the co-pack was distributed to 11 of the SUN districts and from Jan-17 it was distributed to all 14 SUN Districts.

The purpose of this analysis

The purpose of this analysis was to establish whether dispensing patterns of diarrhoea treatments changed following the introduction of the GRZ ORS/Zinc co-pack in Mongu District, one of the SUN districts.

Methodology and sample size

An initial survey was carried out of health centres in Mongu (n=30) to establish the stocking levels of the key medicines for the treatment of non-bloody diarrhoea, namely:

¹ GRZ = Government of the Republic of Zambia

1. ORS alone
2. Zinc alone
3. GRZ ORS/Zinc co-pack

A sub-sample of health centres was then chosen and data on dispensing practice for diarrhoea cases was collected. This sample consisted of all centres which had:

1. Both ORS sachets and Zinc tablets in stock in Oct-16 and Oct-17 and
2. the GRZ ORS/Zinc co-pack in stock in Oct-17.

These centres had all treatment options available: ORS alone, Zinc alone, ORS and Zinc from separate sources or the GRZ ORS/Zinc co-pack. 7 centres met these criteria. The month of October was chosen as this is regarded as the peak month for diarrhoea cases during the year.

The centres in the sample were:

- 1 Mongu Nalwei RHC
- 2 Mongu Mweeke RHC
- 3 Mongu Mulawbwa
- 4 Mongu Nasange RHC
- 5 Mongu Lukweta RHC
- 6 Mongu Lukalanya RHC
- 7 Mongu Kaande RHC

The data

The data collected was from two sources:

1. The HAI1 forms which summarise diseases treated by the health centre on a monthly basis. From these forms the total cases of non-bloody diarrhoea in children under 5 was extracted for the months of Oct-16 and Oct-17.
2. The Out Patients Department treatment records. This details the individual treatments given to out-patients. Tally sheets were used to extract the information on diarrhoea treatments given to under 5 children.

After tallying, the totals from the HAI1 forms were compared with the tally sheet totals to check that they matched.

Over the 7 health centres 176 cases of diarrhoea in out-patients were recorded in Oct-16. In Oct-17 the number of cases was much higher at 389.

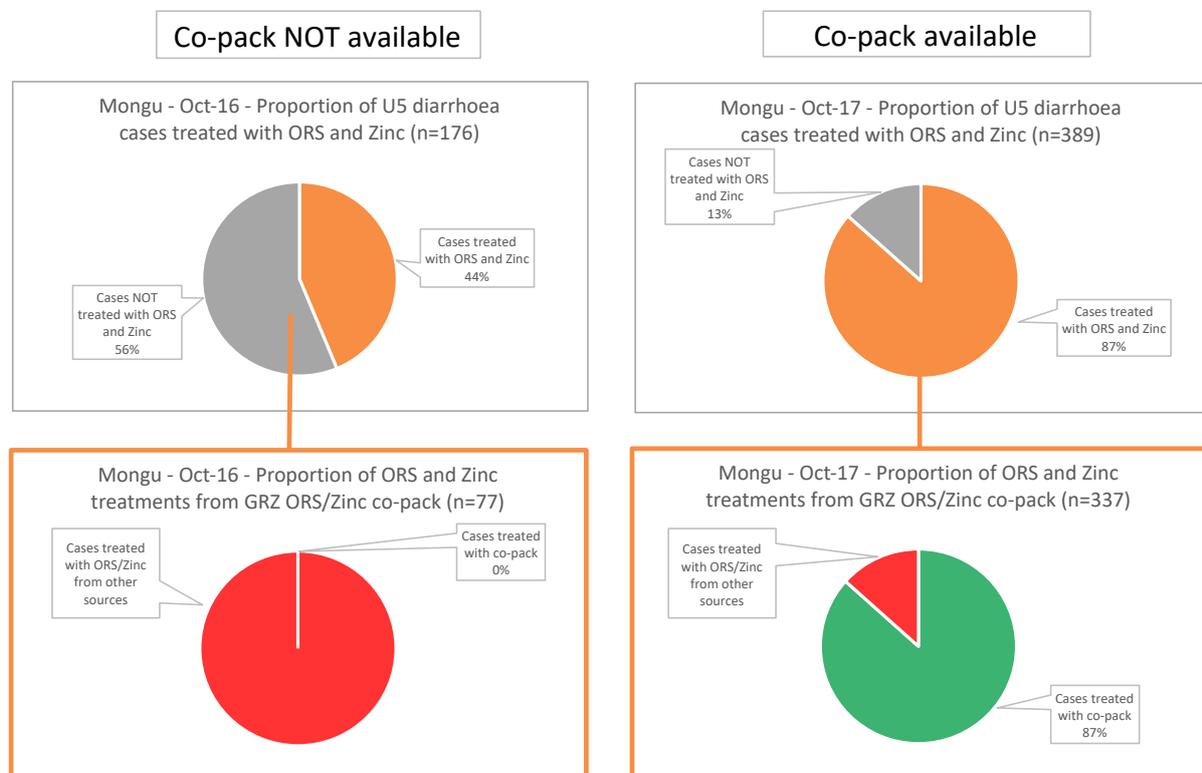
The results

Treatment with ORS and zinc

In the Mongu centres the percentage of cases treated with ORS and Zinc increased dramatically from 44% in Oct-16 to 87% in Oct-17 after the introduction of the GRZ ORS/Zinc co-pack in Jan-17 while the number of non-bloody diarrhoea cases treated

increased from 176 to 389. Of those cases treated with ORS and zinc, 87% were provided by the GRZ ORS/Zinc co-pack. See Figure 1.

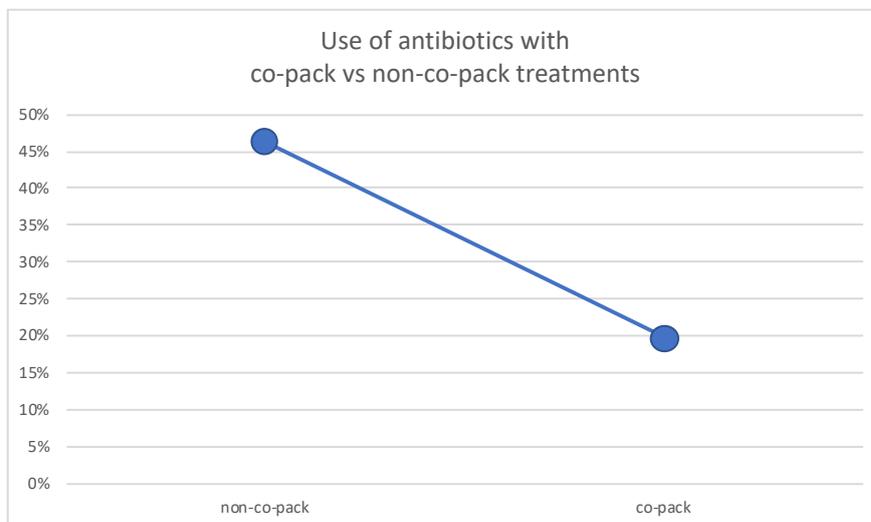
Figure 1: Non-bloody diarrhoea treatments with ORS and Zinc in Mongu health centres in Oct-16 and Oct-17 after the introduction of the GRZ ORS/Zinc co-pack in Jan-17



Use of antibiotics

Treatments with the co-pack were less likely to be given together with antibiotics. In Oct-17 46% of cases that were not given co-packaged ORS and Zinc were also given antibiotics (45/97). Of those given co-packaged only 20% (58/292) were also given antibiotics. See Figure 2. However, this finding needs to be treated with some caution. We were not intending to analyse for antibiotic use and so did not check stock levels of antibiotics in Oct-17.

Figure 2: The use of antibiotics with co-pack and non-co-pack treatments



Conclusions

Co-packaging of ORS and zinc greatly increases the number of diarrhoea cases treated with both ORS and zinc even in a situation where dispensing on both together from separate sources is already very high.

There is also tentative evidence that co-packaging ORS and zinc reduces the level of antibiotic use.

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