

The Economic Burden of Diarrhoeal Disease in the Olifants WMA, SA

Maronel Steyn , A Maherry and B Genthe

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MY message

1. Why we did it
2. What we did
3. What we found

Dr Seuss's Horton hears a Who



The study



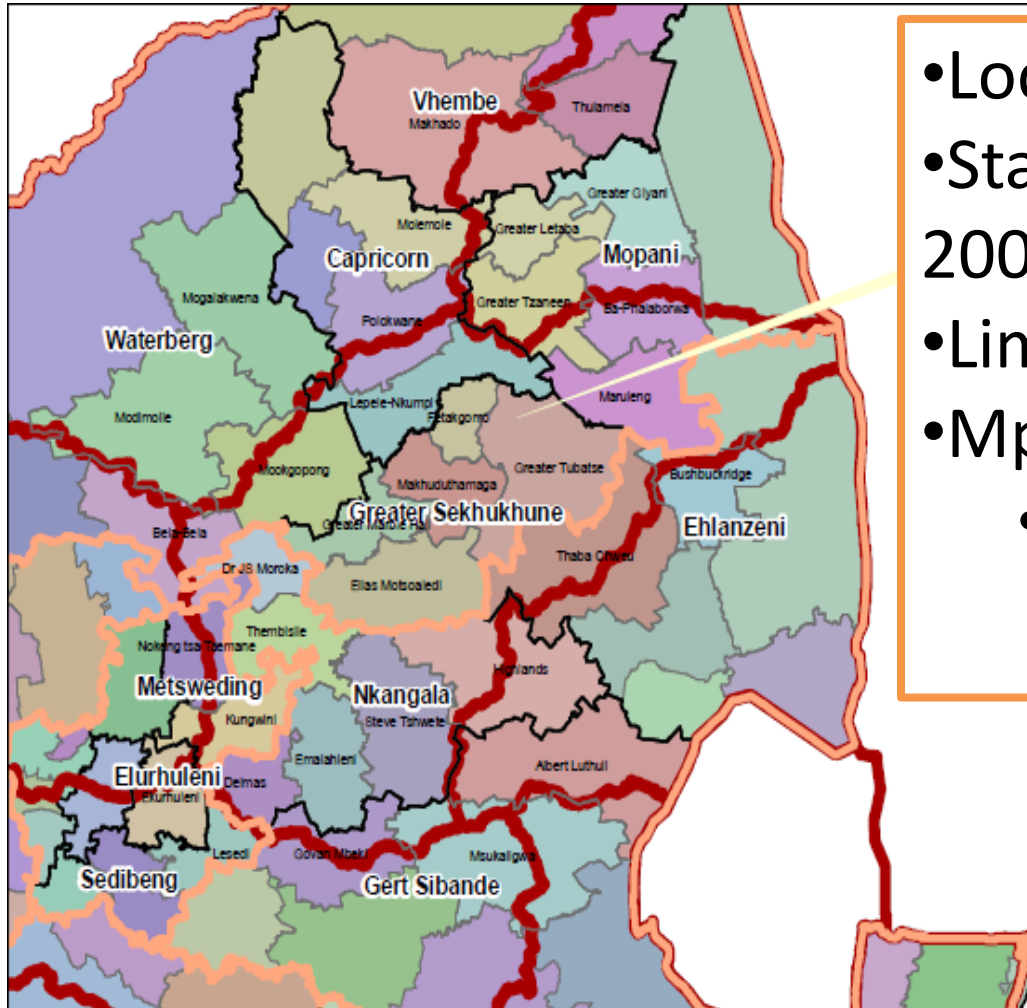
- Olifants WMA
- Illness – Diarrhoea
- Cost of illness approach

Diarrhoea

WHO (2002) Definition
“Passing of three or more loose stools per 24hr period”

“Any stools passed within that time period containing blood “

Olifants WMA



- Local & District Municipalities
- Stats SA Community Survey 2007
- Limpopo – 1.8mil
- Mpumalanga – 1.5mil
- Nr of People – 3.4 mil



Factors

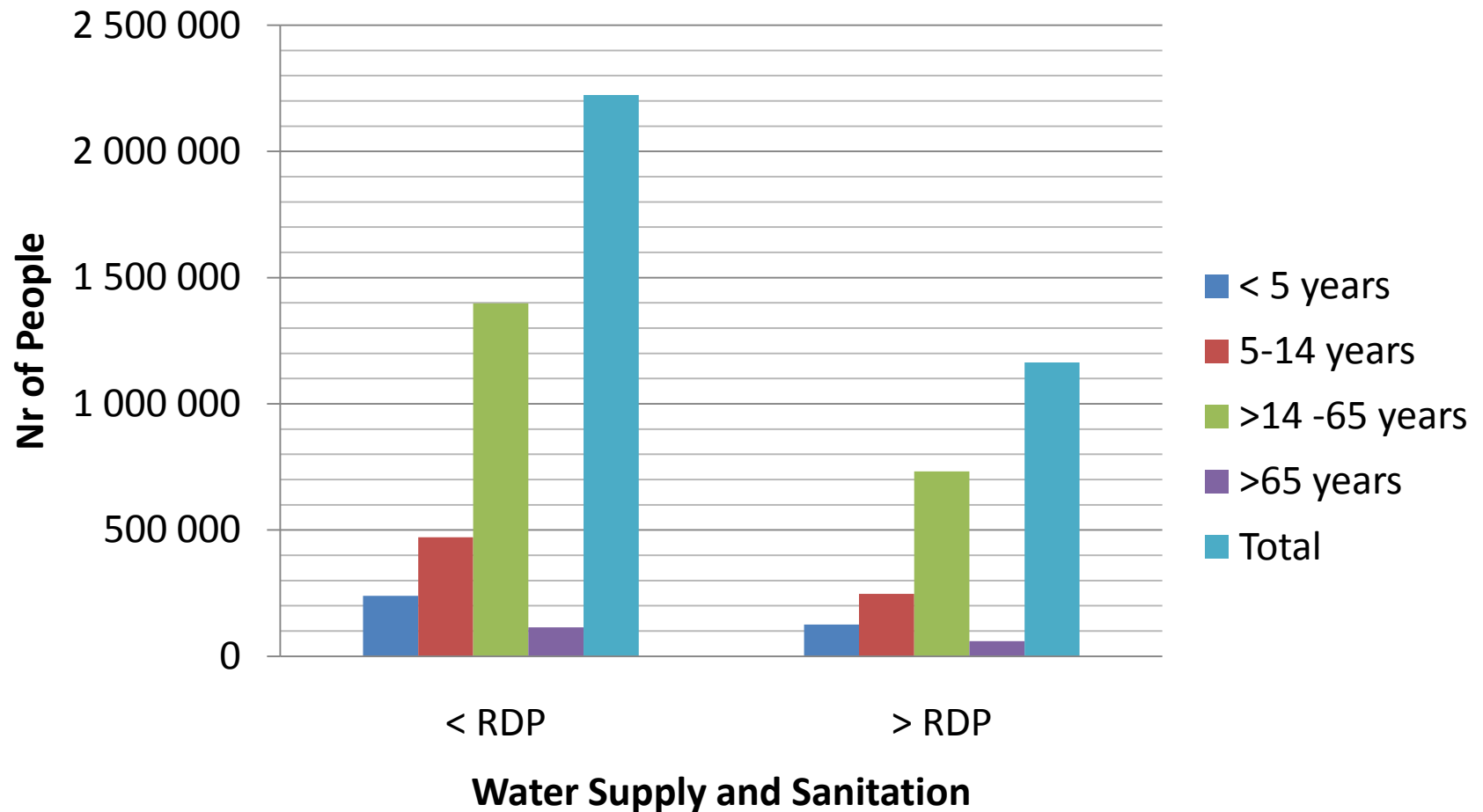
- ❖ Age groups – old versus young
 - < 5; 5-14; 15-64; >65
- ❖ Water supply and sanitation
 - < RDP water & sanitation supply
 - > RDP water & sanitation supply
 - Confounding factors not included (type of housing, education, income)



Cost of illness (COI) approach

- Direct costs
 - Medical treatment costs
 - Transport costs
- In-direct costs (*Done by De Lange and Mahumani*)
 - Opportunity costs
- Pegram et al 1998
- DWAF, 2001
 - Assumptions

Water Supply and Age groups



Assumptions

- Incidence rate – 2.5 episodes
 - Wright et al., 2007 – 7.2 episodes
- 8% treated if < RDP W & S
- 5% treated if > RDP w & S
- 50% of local clinic, GP
- 70% of hospital cases – transport costs, rest walked

Diarrhoea: Incidence and Death

Age Groups	Diarrhoea in group with < RDP W & S	Diarrhoea in group with >RDP W & S	Diarrhoea deaths
<5	600 798	62 669	3 723
5 - 14	471 943	61 719	931
>14 - 65	1 048 693	76 145	2 516
>65	114 925	10 881	498
Total	2 225 650	210 728	4 654

COST

Description	< RDP (Low service level)	>RDP (High service level)
	Direct health costs (R3 769)	Direct health costs (R 3 349)
Estimated diarrhoea incidences	2 220 151	210 636
# of cases treated	(8%) 177 612	(5%) 10 532
Average Treatment costs	R 3 769	R 3 349
Total Direct Health costs	R 669 419 899	R 35 270 978
Total Direct Health costs (million)	R 669	R 35

CONCLUSION

Pollution Prevention is
cheaper than Treatment



Providing people
with >RDP level
water is better than
the cost of
Diarrhoea



Final Conclusion



A person is a
person no
matter how
small !

Thank You....

