The treatment of child illness in Southern Africa - how has it changed over time?

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Introduction

The care of children when ill is a critical element of the push to achieve the Millennium Development Goals, alongside skilled attendance at birth and immunisation. However it is an area that has been rather neglected amongst population researchers. One reason for this is that although the number of children visiting an institution when ill is simple to calculate, it is difficult to assess the quality of care received by the children, which is clearly related to the outcomes of illness. This paper studies the treatment of child illness through studying the destinations of care for children suffering from diarrhoea and acute respiratory infection (ARI) and hypothesises about the quality of care depending on the destination reported by the mother.

A further element relating to this study are the massive changes in the health systems over time in most countries around the world, with deregulation and liberalisation of the health systems to private providers highlighted by the World Bank. Botswana, Malawi, Namibia and Zambia are no different to this and their health systems have been changed over the past number of years dramatically.

The aim of this paper is to study the four countries of Botswana, Malawi, Namibia and Zambia and to compare changes in the health system organisation with the treatment of child illnesses. The place where children are taken to when they are ill will be analysed, with each type of location assessed, on a country by country basis, for quality of care. Clearly these are making large generalisations about the care given in each of these locations, but there are commonalities that can be observed. Previous work has shown that there have been large shifts in the places where children are taken for care, tied closely to the reforms that are happening in the countries. Yet the aim of these reforms should not be simply to get children to any type of care - it should be good quality care by a skilled professional.

Data and Methods

The Demographic and Health Surveys (DHS) from each country (in Botswana the Family Health Survey was used) were analysed. All the DHS that have been conducted were used, meaning that the dataset used were:

- Malawi – 1992, 2000 and 2004
- Namibia – 1992, 2000 and 2006
- Zambia – 1992, 1996, 2001 and 2007
- Botswana – 1996 and 2007/8

Children suffering from diarrhoea, coughing and fever in the two weeks prior to the survey were recorded, and the destinations of care sought. These destinations were prescriptive, identifying between health centres, hospitals and doctors in both the public and private sectors, as well as pharmacies, shops, traditional healers and friends and families. Each survey had a country specific list of destinations, which changed slightly between survey rounds. ARI was assumed if the child had a fever and short, rapid breaths.

For each survey, and for ARI and diarrhoea separately, the following were calculated:

1. The percentage of children taken to any type of care – be it medical or non-medical
2. The percentage of children taken to care which was classified as medical – so a hospital, health centre, community nurse and similar.
3. The locations where the children are taken to – calculated as simple counts of children as well as percentages
4. The locations, as classified into public establishments, private establishments and other. Other is a category that contain shops and, in some places, pharmacies. The standard of these shops and pharmacies vary widely between location and country.
5. Religious facilities vary widely too. In Malawi they are mainly the CHAM facilities that are very similar to the public health centres and hospitals, even charging similar amounts for care. In other places the religious hospitals may be non-existent or work on more a private basis – charging higher fees and so on.

After these figures were obtained the quality of each type of care establishment was assessed by experts in each country so that the overall quality of care in the country is assessed over time. The parallels between the health policy environment and care for children are therefore assessed. Questions posed include:

- Did any change in policy lead to more people being cared for in better quality facilities?
- Do more children get taken to a shop now? What does 'shop' mean in the different contexts.

Results

The results for Malawi, Namibia and Zambia are shown below – showing the percentages of children with both ARI and diarrhoea, with the numbers getting treatment and the basic information about where the treatment is obtained from.

ARI

	Malawi			Namibia			Zambia			
	1992	2000	2004	1992	2000	2006	1992	1996	2001	2007
Numbers suffering from ARI	545	2816	1840	646	669	364	681	773	843	539
Percentage with ARI in previous two weeks	14.4	26.7	18.8	18.1	17.8	7.8	12.6	12.7	14.6	9.2
% sought treatment from anywhere	70.1	62.3	69.3	74.0	57.9	70.6	77.9	84.5	76.9	72.5
% treated in places except for traditional or 'other'	99.0	95.0	95.7	99.0	100.8	101.6	91.7	95.6	99.1	95.9
% treated traditional and other (can be treated in multiple places)	6.3	9.6	5.8	6.3	0.5	0.8	17.0	8.7	5.7	3.6
% formal visits public	54.0	31.5	43.9	94.1	90.9	82.2	70.6	77.2	79.5	81.7
% formal visits private	24.9	6.9	4.6	2.5	5.3	13.9	11.9	8.5	7.7	5.6
% formal visits religious	0.0	8.0	7.3	0.0	0.0	0.0	5.8	4.0	5.5	0.0
% formal visits to a shop, pharmacy or dispensary	21.2	53.6	44.3	3.4	3.7	3.9	11.7	10.3	7.3	12.6

Diarrhoea

	Malawi			Namibia			Zambia			
	1992	2000	2004	1992	2000	2006	1992	1996	2001	2007
Numbers suffering from diarrhoea	821	1859	2177	738	454	577	1216	1435	1225	911
Percentage with diarrhoea in the previous 2 weeks	22.1	17.9	22.6	22.6	13.4	13.4	23.1	24.4	21.7	15.9
% sought treatment from anywhere	56.0	44.7	58.1	73.8	54.3	64.9	72.1	56.0	52.0	65.7
% treated in places except for traditional or 'other'	93.8	92.5	92.4	97.0	101.2	100.3	83.0	84.2	87.9	95.8
% treated traditional and other (can be treated in multiple places)	9.0	14.3	9.8	7.8	6.9	5.6	27.4	20.9	17.0	9.7
% formal visits public	67.9	52.1	54.3	97.9	92.4	89.3	79.4	89.7	79.4	84.4
% formal visits private	27.9	7.0	5.5	1.1	4.8	7.8	8.8	5.5	8.8	5.1
% formal visits religious	0.0	11.3	8.7	0.0	0.0	0.0	5.5	0.0	6.8	5.6
% formal visits to a shop, pharmacy or dispensary	4.2	29.5	31.5	1.0	2.8	2.9	6.3	4.8	5.0	4.9

In Malawi there has been a large increase in the percentage of visits to a shop or pharmacy, while there have been reductions in the numbers going to the private sector. The main place of treatment is a shop, followed by the public sector. This clearly indicates a fall in the standard of care received, with those going to shops not benefiting from clear medical care. Further breakdowns of where a child is taken to in the public sector are given in the full paper.

The situation in Namibia is that most children are taken to the public sector, although this is reducing over time with the private sector taking its place. This follows the policies enacted by the government regarding deregulation of the private sector. Few people take their child to a shop or pharmacy for treatment, indicating a higher quality of care.

Zambia shows a fall in the percentage of children who seek treatment for diarrhoea, although in the places where children are taken for care there has not been much change between the four surveys. Fewer children are taken to traditional healers, with a higher percentage going to more formal establishments and receiving medical care. This indicates that the health system reforms are working for this group and that this should be reflected in the under 5 mortality rate.

Conclusions

There have been large changes in the places where children are taken for care for common illnesses, mirroring the changes in the health systems regulation. However, these are not necessarily enhancing the quality of care provided, with Malawi showing a large increase in children going to unregulated shops and pharmacies, while in Namibia the private sector is increasing in coverage. The quality of care in Zambia has not changed much.

These changes do link with the mortality rates in the different countries. More emphasis needs to be made for children to be taken to good quality medical establishments for care in order to reduce the levels of mortality and to meet the MDGs.