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BRIEFING

The Cost of Coping with Illness

Rwanda

Health financing, access to healthcare, health costs and household impacts: a summary of Save the Children UK's research in Rwanda, 2003–05

Background

The 1994 genocide and ensuing civil war decimated the country's fragile economic base and institutional infrastructure, severely impoverished the population and eroded the country's ability to attract private and external investment. Since then, the government has instituted a series of economic reforms (including promotion of private-sector development, reforms in public administration and financial management, and decentralisation), alongside an extensive programme of infrastructure reconstruction.

In the health sector, the government has pursued a programme of cost recovery, introducing user fees in 1996. The utilisation rate of health services, however, dropped from 0.6 cases per person per year (1995) to 0.3 (1997/98 to 2001), after the costs of health services increased. In response to falls in utilisation, the government emphasised the role of community health insurance (Mutuelles)[1] and pre-payment schemes. While enrolment in the Mutuelles has increased from 7 per cent to 27 per cent between 2003 and 2005 (World Bank, 2005), there is evidence that not only are the poorest groups under-represented in the membership, but also the wealthiest groups. Combined with the low enrolment levels, the effectiveness of the risk-pooling mechanism and the ability to mobilise resources is limited.

While there has been steady economic growth in the years since the genocide, Rwanda remains one of the poorest countries in the world, with a GNI per capita of $210. It is still dependent on external assistance, which finances nearly 60 per cent of Rwanda's public expenditure (World Bank, 2005), (*see* Table 1 for other health-expenditure indicators). With the highest population density in Africa (340 inhabitants/km^2), it is estimated that 60 per cent of the 8.2 million

Table 1: Selected health-expenditure indicators

Selected indicators	Rwanda	Sub-Saharan average
Population (2003)	8.4 million	
GNI/capita ($) (Atlas method) (2003)	210	490
Official development assistance/capita ($) (2002)	44	28
Total health expenditure per capita (current $) (2002)	11	29
% GDP spent on health (2002)	5.5	6
Health expenditure, public (% of GDP) (2002)	3.1	
General government expenditure on health as % of total government expenditure (2002)	13.4	
% of total health expenditure that is public (2002)	57.2	41
% of total health expenditure that is private (2002)	42.8	
% of private payments that are out-of-pocket	65.2	
Life expectancy at birth (years) (2002)	40	46
Under-5 mortality rate/1,000 live births (2002)	203	174

Sources: HNP stats, 2002/03; WHO statistics for 2002; World Bank development data 2002; WDI 2004

population lives below the national poverty line (Government of Rwanda, The Household Living Conditions Survey, 2001), with 96 per cent of the food-poor living in rural areas. Economic performance has been further hindered by the HIV/AIDS epidemic (HIV prevalence is estimated at 4 per cent in rural areas and 11 per cent in urban areas).[2] There are an estimated 250,000 adults and children living with HIV in Rwanda and 40,000 children are born to HIV-positive mothers per year. Life expectancy at birth (40.2 years) is decreasing, largely due to HIV/AIDS and increasing levels of poverty.

Half of the population is under 17. Thirty per cent of children in Rwanda are orphans and this is predicted to rise to 32 per cent by 2005 – this is an estimated one million orphans (Save the Children UK, 2005). Ratios for infant mortality (118 per 1,000 live births) and maternal mortality (1,400 per 100,000 live births) are significantly worse than the sub-Saharan Africa average. Consequently, progress in Rwanda towards the Millennium Development Goals for 2015 has been slipping, and poor health remains a significant constraint to poverty reduction.

In response to this, Save the Children has undertaken a series of studies to investigate, describe and document changes in the population's different socio-economic groups and examine the variations in health practices, conditions and access to health services across these groups. The aim is to use the findings as a case study on affordability, with recommendations for next steps, including the objective of influencing the second Poverty Reduction Strategy on the issue of affordability and access to basic services.

Save the Children's research: methodology

A series of studies was undertaken in 2000, 2003 and 2005 using a household economy approach[3] and health surveys. All the studies distinguished four different wealth groups; the 'poorest', the 'poor', the 'middle' and the 'better off'. The focus of the 2005 study was to update the economic profile and assess the health-seeking behaviour of the population. It also reviewed the population's health-seeking behaviour in conjunction with their ability to pay for healthcare (enabling the linking of the different data sets), as well as the current Mutuelle system.

The study was conducted in Gatonde health district, Ruhengeri. All of the information gathered from the interviews focuses on the latest year, from March 2004 to February 2005. A household economic assessment was undertaken in one village in each administrative district (Bugarura, Bukonya and Buhoma) within the Livelihood Zone. One health centre was selected for the health survey in each village. It was decided to select three of the health centres that had active Mutuelle agreements[4] in place and one that did not. A total of 20 interviews were held: four key informant and 16 wealth-group interviews.[5]

Save the Children's research: findings

Increases in income since 2003 have not kept pace with the increase in the cost of living. While overall income for all wealth groups has increased – by 10–15 per cent for the poorer groups, and by more than 50 per cent for the 'middle' group – prices for main commodities such as food and basic household needs have also increased drastically. On average, prices have increased by about 45 per cent in the last two years. Inflation currently stands at about 7.7 per cent. The prices for main food staples, such as cassava and sweet potatoes, have increased the most. Although most households produce these products, the poorer households tend to buy additional amounts when their harvest runs out. In terms of labour, it seems that the overall rate for casual/daily labour has also increased but only in line with the rate of inflation. In addition, the price for livestock has deteriorated since 2003, largely due to the government's new zero-grazing policy. Overall, this indicates that life has become more expensive and households need to earn more cash in order to cover their basic needs.

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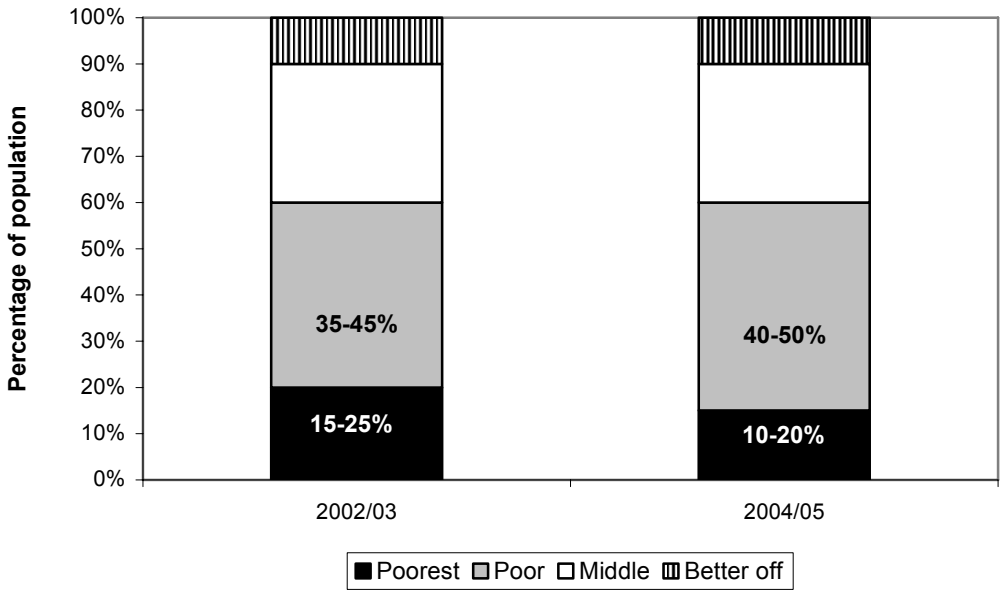
Fig 1: Changes in social economic groups, 2002/03 to 2004/05



Evidence suggests that the gap between the richer and poorer groups is widening.
In the last two years the 'poor' wealth group has increased in size and the 'poorest' has decreased in size (*see* Figure 1).

The destitute are included in the 2004/05 figure for the 'poorest'; they constitute about five per cent of the population. However, if we compare this to income levels and changes overall in wealth groups, it shows that the income gap has grown between the 'poor' and the 'middle'. During the 2002/03 study, the 'middle' group earned about twice as much as the 'poor' group; by the 2004/05 update, the 'middle' group was earning more than three times as much as the 'poor' group. As in 2003, only the wealthier groups have any flexible income.[6] Overall, the evidence indicates that the better-off groups are getting richer and the poorer groups are staying where they were two years ago.

A high burden of ill health was evident, with the 'poorest' and 'poor' groups experiencing a significantly higher frequency of illness than the other wealth groups.
The 'poorest' and 'poor' groups reported 8–16 episodes of illness (caused by the key morbidities)[7] per year, compared to four episodes for the 'middle' wealth group. The difference was found mainly in the 0–5 age group, with the poorer groups reporting monthly episodes of diarrhoea, and twice-yearly episodes for at least two children in each family. The 'middle' group, although having equal episodes of malaria, had no episodes of respiratory infections and only twice-yearly episodes of diarrhoea. Worms and skin diseases are common among the lower wealth groups: each child had at least two episodes of worms per year, and at least twice a year experienced skin diseases that required treatment.

Substantial proportions fail to seek treatment.
There is encouraging progress in the uptake of preventative services. Coverage rates for the expanded programme of immunisation are between 80 and 100 per cent for maternal tetanus; 75 per cent of children under five years old attend growth

monitoring; and approximately 90 per cent of women attend four ante-natal visits per pregnancy. However, the utilisation rates for curative care was reported to be very low.

There was a clear link between treatment-seeking behaviour and wealth group, with a significantly larger proportion of the poorer wealth groups not seeking treatment than the better-off groups. In both the 'poor' and 'poorest' groups, formal health services were only accessed as a last resort.

In the 'poorest' wealth group, 75–90 per cent of cases were either self-treated using traditional leaves, or no treatment was sought. This is an increase from 60–70 per cent in 2003. From the 10–25 per cent who did seek treatment, one-third still sought treatment from a traditional practitioner rather than through formal healthcare services. In the 'poor' group, 50–75 per cent of cases were not treated at formal healthcare services; a half of these sought treatment from a traditional practitioner or self-medicated using Western drugs. In the 'middle' group, 100 per cent sought treatment from a formal healthcare facility, although this is a fairly significant change from 2003, when an overwhelming majority used traditional treatment.

While 90 per cent of women attend ante-natal care during pregnancy in all wealth groups, it is only women in the 'middle' group who are delivering at the health centre. Women from the poorer groups are still giving birth at home. The cost of the various fees incurred while delivering at a health centre was given as the main reason for this. In addition, the traditional birth attendants accept payment in kind, which is a more attractive option for the 'poor' and 'poorest' wealth groups whose cash availability is low.

Overall poorer households are likely to pay more as a proportion of their income, even though, in absolute terms, they are less able to buy healthcare.

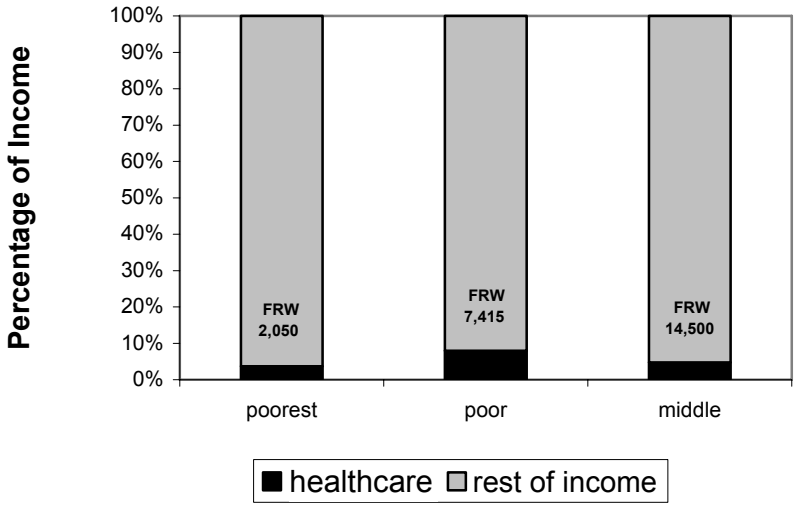
Given that frequency of illness is higher among the 'poorest' and 'poor' groups, the direct costs of illness – had they sought treatment – would be higher for these groups in both real and absolute terms.

Although the 'middle' group spends about four times as much as the 'poor' group, all groups spend between four and eight per cent of their total income on healthcare. For the 'poor', the proportion is slightly higher when compared with the 'middle' group (*see* Figure 2). The lower level of healthcare expenditure in the 'poorest' group compared to the other groups is largely due to the failure to seek care when ill. During the interviews, the 'poorest' and 'poor' showed a willingness to access the formal health services, but they were unable to. Their limited access to cash and/or assets that could be sold (without resorting to distress-coping) to cover the direct costs of illness precludes them from accessing formal healthcare services or seeking treatment at all. Indeed, this point is clearly demonstrated by the fact that the 'middle' wealth group increased its expenditure on social services by almost 10 per cent since 2003, while the 'poorest' group reduced its expenditure on social services from about 10 per cent to 7 per cent.

Taking the average number of illness episodes/ average household size for each wealth group, Figure 3 shows the estimated household health expenditure if treatment had been sought at a formal healthcare facility, versus the actual cost for seeking treatment during the course of a year.

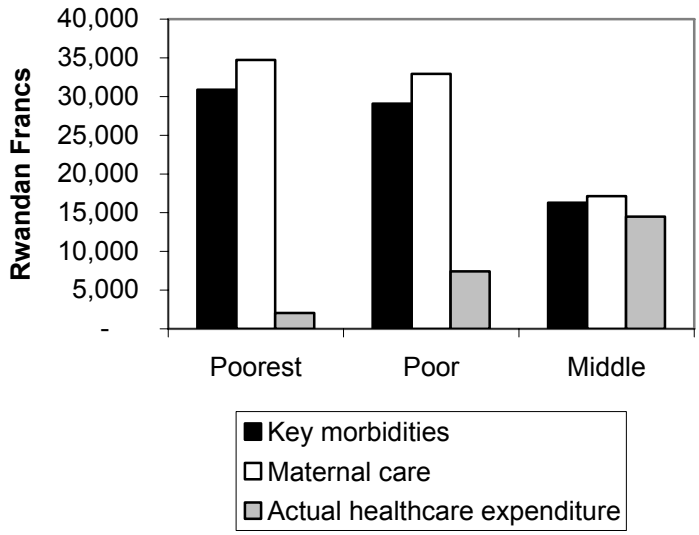
In essence, if the 'poorest' and 'poor' had received treatment from formal healthcare services, for the estimated number of illness episodes, they would have had to spend 52 per cent and 30 per cent of their income respectively on healthcare, thereby reducing available income for food and other household essentials. It is clear that the lower wealth groups would need to spend considerably more on healthcare if they are to receive complete and effective treatment. Inadvertently, by not seeking appropriate treatment and therefore facing recurrent debilitating illness, they increase the indirect costs of illness in terms of the significant costs to the carer, and in terms of time away from work, loss of earnings and increased risk of death.

Fig 2: Average amount spent on healthcare per wealth group in 2004/05, as a percentage of income (in Rwandan francs)[8]



Healthcare expenditure can have serious negative consequences on household economy and long-term welfare, particularly for the poor. Although the 'poor' group had accessed the formal health services, between 25 and 50 per cent did so by selling assets or getting into debt through borrowing from better-off people. Many of the 'poor' households interviewed explained that they sold their land in order to cover the cost of secondary school or healthcare. One person explained that he sold all his land for 100,000 FRW (Rwandan francs) to pay for surgery that cost him 90,000. This moved his household from the 'poor' wealth group into the 'poorest' group. In Chyabingo village, it was reported

Fig 3: Expected versus actual healthcare expenditure, by wealth group, 2004/05



that about 10–20 families per sector sold their land in the last year, some moving to Umutara. Households that have sold land are now spending additional money to rent land for cultivation. The selling of these productive assets is a distress-coping mechanism. To reclaim or reinvest in these assets costs a lot more than selling them. Once they are sold, it is usually very difficult for a household to regain them.

While the uptake of the Mutuelles has increased in recent years, 55 per cent of the population remains excluded from the benefits of the scheme.
Compared to 2003, households have a greater understanding of the advantages of the Mutuelle and have shown an increased willingness to join, giving the main reason as the decreased cost of healthcare per year, per household. In the two older schemes, membership is between 30 and 45 per cent. However, nearly 90 per cent of the members are from the two wealthier groups, with significant under-representation from the poorer groups.

Even if a subsidy was provided for the joining fee, poorer households would be required to find an estimated 12,310 FRW per year (at 30 per cent of the total cost of treatment) with their current rate of illnesses. This is equivalent to four months' agriculture labour.[9] If the 'poorest' and 'poor' paid the Mutuelle fees they would still not have the flexible income to pay the 30 per cent co-payment required at the health centre.

The current system of payment also restricts the 'poorest' and 'poor' from joining the Mutuelle in that they must register their entire family individually. It is only after all of the family members have been registered that they are able to use the scheme. The reason given for this is that the poor are more likely to have chronic illnesses, would therefore register only the sick family members, and the system would consequently not be able to sustain a high utilisation rate from these groups. Another disadvantage of the current system is that the catastrophic costs of illness resulting from referral to secondary or tertiary care or life-saving surgery in another district are not covered.

There have been innovative steps in other parts of Rwanda to improve membership, such as in Bungwe, where the bank pays each household membership at the beginning of the year and the household pays the bank on a monthly basis. Membership for the 'poorest' and 'poor' households is only possible with some form of assistance and/or subsidisation, or where there are different payment options available, such as paying monthly or paying after the harvest when there is more cash available.

Finally, the Mutuelle system in each community has complete autonomy in setting policies, prices and guidelines for membership. However, it was noted that none of the committee members had training in establishing these types of systems. Neither did they understand the concepts of risk-pooling, cost-sharing and resource mobilisation.

Key conclusions

The evidence presented from this research indicates that:

- The main constraints to accessing healthcare are the costs of formal health services, and poorer households' decreasing access to cash. The majority of people (55 per cent) are unable to afford the high costs incurred when seeking healthcare.
- The ability of poorer households to access healthcare has in fact been reduced, and user fees are perceived as a barrier to healthcare.
- There are inequalities in morbidity patterns and in accessing and utilising healthcare between socio-economic groups.
- The majority of children are still not being taken for treatment for malaria and diarrhoea, and women continue to give birth without skilled attendants. Despite high vaccination coverage infant mortality remains unacceptably high.
- The community cannot cope with the negative impacts of cost-recovery schemes. Although this is not a food-insecure area, households are employing distress-coping strategies to access their basic needs. The selling of productive assets only propels households towards destitution.

- Despite the known benefits of the Mutuelles, the costs incurred in joining and accessing healthcare are still prohibitive for a significant proportion of the population.

If there is to be significant reduction in infant, under-five and maternal mortality, the 'poorest' and 'poor' (55 per cent of the population) must be given an opportunity to access curative healthcare. Cost, quality and equitable access to services are crucial issues and public services at district level are, as yet, unable to meet demand.

The government and donors need to look at alternative options within a wider, more comprehensive healthcare-financing sector strategy, focusing on how the health system can be more equitable or pro-poor. Progress was made in May 2005, when 189 countries, including Rwanda, signed up to resolution WHA 58.31. This states that countries need to move away from user fees towards more pro-poor health-financing mechanisms that help to spread the risk over time and between wealth groups.[10]

To achieve this, actions need to include:

- increasing government expenditure on the health sector (which declined to 9 per cent of government expenditure in 2004), with defined strategies to increase it to at least 15 per cent, as agreed by African Heads of State at Abuja in 2001 and reaffirmed in Gaborone in 2005[11]
- an explicit commitment to moving away from out-of-pocket payments at the point of service for public-sector health services over time, given that this is the most regressive form of financing, and to moving towards more progressive financing mechanisms
- investing in alternative sources of funding by building on and improving existing risk-pooling and health insurance initiatives, and exploring the advantages and feasibility of introducing additional economic safety nets.

Within the Mutuelle system:

- There needs to be a standardised framework with minimum standards to ensure equitable access to healthcare for all.
- Services need to be made free at the point of access, with cards for the poor bought through government subsidy or donor support. This needs to cover all essential healthcare.
- There needs to a clear programme of training and support to communities on the implementation, management and accountability of Mutuelle.
- There needs to be continued awareness raising in communities about people's rights and entitlements, such as who is eligible for exemption, the benefits of purchasing a card, etc.

Finally, healthcare-financing systems cannot be seen in isolation. They need to be understood in the context of how households live; it is essential to link healthcare with livelihood and social-protection programmes. More operational research is needed on the effects of cross-sector programmes.

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Notes

[1] Mutuelles are owned, managed and financed by their community members, who pay an annual premium and receive basic healthcare (including preventive and curative care, family planning and reproductive health services, maternity care and drugs) free of charge or with a lower proportionate fee in health centres and district hospitals.
[2] www.moh.gov.rw/health_indicator.html
[3] Save the Children's household economic analysis assesses people's normal economy: how they usually make a living; their savings, reserves and assets; and how household production and labour are exchanged for other goods.
[4] Not all the Mutuelles had been implemented at the same time and using the same approach.
[5] NB: 20 interviews, of which 8 were health focused, is not enough to capture all the intricacies of the area. However, the team was confident that the information provides a strong argument on households' access to healthcare and the affordability of available health services when building on the strength of the previous studies.
[6] Flexible income is the income that is left over after the household's basic needs of food, non-food and basic services have been met.
[7] Malaria, respiratory infection, diarrhoeal disease, intestinal worms, skin diseases.
[8] $1 = 546FRW as of July 2004.
[9]250 FRW per day for three days a week.
[10] WHO (2005) WHA 58.31, available at www.who.int
[11] The Gaborone African Ministers of Health Declaration, October 2005, can be found at www.africa-union.org

Save the Children UK
1 St John's Lane
London EC1M 4AR
UK

Tel +44 (0)20 7012 6400

www.savethechildren.org.uk

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