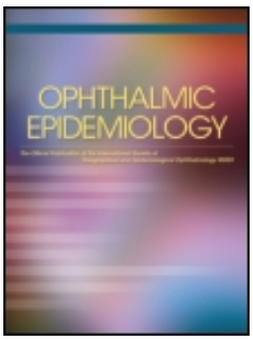

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ORIGINAL ARTICLE

Costs of Eye Care Services: Prospective Study from a Faith-based Hospital in Zambia

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ABSTRACT

Purpose: To estimate the mean costs of cataract surgery and refractive error correction at a faith-based eye hospital in Zambia.

Methods: Out-of-pocket expenses for user fees, drugs and transport were collected from 90 patient interviews; 47 received cataract surgery and 43 refractive error correction. Overhead and diagnosis-specific costs were determined from micro-costing of the hospital. Costs per patient were calculated as the sum of out-of-pocket expenses and hospital costs, excluding user fees to avoid double counting.

Results: From the perspective of the hospital, overhead costs amounted to US$31 per consultation and diagnosis-specific costs were US$57 for cataract surgery and US$36 for refractive error correction. When including out-of-pocket expenses, mean total costs amounted to US$128 (95% confidence interval [CI] US$96–168) per cataract surgery and US$86 (95% CI US$67–118) per refractive error correction. Costs of providing services corresponded well with the user fee levels established by the hospital.

Conclusion: This is the first paper to report on the costs of eye care services in an African setting. The methods used could be replicated in other countries and for other types of visual impairments. These estimates are crucial for determining resources needed to meet global goals for elimination of avoidable blindness.

Keywords: Cataract, costs, hospital, refractive error, zambia

INTRODUCTION

Zambia is a lower middle-income country in southern Africa with a per capita gross domestic product of US$1,414 in 2011.[1] The population is approximately 13 million, with 1.7 million people living in the capital Lusaka. A rapid assessment of avoidable blindness in the Southern Province among people >50 years of age found that 2.3% were blind and another 8.7% visually impaired.[2] The main causes were unoperated cataract (47%), uncorrected refractive error (20%), posterior segment disease (19%) and corneal scarring (10%). The World Health Organization's VISION 2020 is an international initiative aiming to eliminate avoidable blindness by 2020.[3] A 2011 situation analysis of eye care services in Zambia concluded that VISION 2020 process indicators were considerably below targets and services need to be rapidly expanded to meet the goals.[4] The biggest problems were lack of skilled human resources, inadequate spectacles manufacturing workshops, and large inequities in service provision between urban and rural areas. The rate of ophthalmologists per 250,000 population was 0.34 compared to the VISION 2020 target for Africa of one ophthalmologist per 250,000 people.[5]

Lusaka Eye Hospital (LEH) is a private not-for-profit facility established in 2001 by the Seventh-day Adventist Church and the Christian Blind Mission. The hospital, which is one of only four tertiary eye care facilities in Zambia, offers a wide variety of services, ranging from refractive error correction to advanced surgical procedures.[4] LEH has eight inpatient wards with a total of 40 beds, a pharmacy and a spectacle manufacturing workshop. Around 40 staff

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work at the hospital, including between one and three ophthalmologists at any one time. While the immediate catchment population is approximately 2 million people, patients from all over Zambia travel to the hospital due to lack of services in other provinces.

Hospital income is generated from donations and user fees. However, donations have decreased in recent years and user fees are by far the most important income source. Two types of fee systems are in place; ''high-cost'' fees are between 1.5 and 6 times higher than ''low-cost'' fees. For ''high-cost'' services, consultations are by appointment, patients are always seen by an ophthalmologist and the wards have self-contained toilets and bathrooms. With ''low-cost'' services, wards have shared toilets and patients are seen by an ophthalmic clinical officer on a first-come, first-served basis, with an ophthalmologist only consulted for complex cases. High- and low-cost fee levels are determined from a mixture of assessing the revenue needed to operate the hospital and the perceived ability of patients to pay.

The objective of this study was to estimate the mean costs per cataract surgery and refractive error correction at LEH. Costs were estimated from perspectives of the hospital and the patients.

MATERIALS AND METHODS

Diagnoses Categories

Refractive error and cataract surgery were the only two diagnoses categories included. Focus was placed on these syndromes because they are two of the major causes of blindness and low vision prioritized by the VISION 2020 Initiative[6] and because the costs of correcting the two conditions can meaningfully be estimated without patient follow-up. This is in contrast to glaucoma, for example, which is a chronic disease that requires daily use of eye drops and lifelong follow-up.

Patient Specific Cost Data

Patients visiting LEH during March and April 2011 were invited to participate in the study following their clinical consultation. Informed consent was completed and sociodemographic and out-of-pocket treatment cost questionnaires were administered (see the Appendix). Interviews lasted approximately 15 minutes. Information about both the present consultation and previous visits to either the study hospital or another health facility for the same eye problem was collected. Questions included the length of the journey to the hospital and the costs of transport. For patients using their own car, the price of petrol was assumed to be US$1.72 per liter. Types and quantities of drugs purchased or given to the patient as part of the consultation were gathered from patient records. Drug unit costs were obtained from the pharmacy.

Hospital Costs per Patient Consultation

Hospital expenditures for 2010 were divided into capital and recurrent costs. Capital costs included buildings, vehicles, medical equipment, computers, etc. Present values and life expectancies of capital items were approximated from procurement lists and by consulting staff in charge. Items were annualized by 9% per year.[7] Recurrent costs were collected from 2010 expense records and receipts and divided into major groupings, such as salaries, utilities, drugs and general supplies.

Overhead costs were defined as all items that could not be classified according to specific diagnoses categories, such as administrative staff, utilities and general supplies. All patients, irrespective of diagnoses, were allocated consultation overhead costs, which were estimated as total 2010 overhead costs divided by the number of consultations and surgeries during 2010. A mean surgery overhead cost was calculated as total surgical-related expenses divided by the annual number of surgeries. Inpatient wards occupied approximately 20% of the building space. Medical equipment, medical supplies and clinical staff were classified according to either cataract surgery, refractive error or other diagnoses. Costs of the spectacles manufacturing workshop were estimated separately and allocated to the refractive error category.

Data Analysis

Costs were estimated in 2010 US$ using an exchange rate of 4729 Kwacha to one US$. The median and arithmetic mean were calculated across all study patients and a 95% confidence interval (CI) was calculated around the mean. Cost data are typically highly skewed with a long right hand tail, reflecting the fact that some patients incur high costs because of greater disease severity and/or medical complications.[8] While the median may be more appropriate for descriptive purposes, this measure does not allow for determining the costs of treating all patients, so it is also important to present the mean in treatment cost studies.[9] To avoid double counting, patient user fees were excluded from the total cost estimates and reported separately. Data were analyzed in Microsoft Excel and Stata version 11.1 (StataCorp 2009, College Station, TX).

Mean costs of cataract surgery and refractive error correction were compared to estimates from other settings. These studies were identified by searching

PubMed (US National Library of Medicine) using the terms ''costs,'' ''cataract'' and ''refractive error.'' All results from these papers were converted to 2010 US$ using consumer price indices and average annual exchange rates.[1,10]

The study was approved by the research ethics committees of the University of Zambia and the London School of Hygiene and Tropical Medicine.

RESULTS

Study Patients

A total of 94 patients were invited to participate and 90 patients agreed to do so; 47 had cataract and 43 refractive error. The mean age was significantly higher for cataract patients than for those with refractive error ($p < 0.001$; Table 1). The youngest patient was a 12-year-old girl with refractive error and the oldest an 87-year-old woman with mature cataract. Fifty patients (56%) were between 20 and 65 years old and 38% of these were in paid employment during the preceding month. Information on out-of-pocket costs was incomplete for six patients, so the sample was reduced to 84 patients for these estimates.

Previous Consultations

A total of 31% of patients had sought treatment once earlier and 6% had done so at least twice before (Table 1). Median and mean out-of-pocket costs per previous consultation among this sub-sample of 28 patients were US$3 and US$13 (95% CI US$0–91), respectively. User fees and drugs comprised on average 85% of costs and transport 15%.

Patient Out-of-pocket Costs at LEH

All of the study patients used ''low cost'' services. Median out-of-pocket costs were US$151 for cataract surgery and US$61 for refractive error correction. Transport costs comprised on average 16% of total costs.

For cataract surgery, mean user fees were US$114 (95% CI US$106–137), drug charges US$23 (95% CI US$4–42), and transport costs US$17 (95% CI US$0–51). Hence, total mean out-of-pocket costs for cataract surgery amounted to US$154 (95% CI US$114–192).

Mean user fees for refractive error correction were US$6 (95% CI US$4–6), drug charges US$2 (95% CI US$0–5), spectacles US$51 (95% CI US$0–114), and transport costs US$18 (95% CI US$0-52). Hence, total mean out-of-pocket costs for refractive error correction were US$77 (95% CI US$16–144).

The most common sources of funds to pay for treatment were household savings (34%) and assistance from relatives (33%); (Table 2). A total of 28% of cataract patients had their expenses paid for by the disability charity ''Cheshire Homes''.

Overhead Costs

A total of 15,763 consultations and 1650 surgeries took place at LEH during 2010. Hence, a total of 17,413 patient events were attended to. The most common types of surgery were cataract (62%) and conjunctival growth (11%), and the most common causes of consultations were refractive errors (19%) and allergic conjunctivitis (16%). As many as 38% of consultations were classified as ''other,'' indicating patients who were referred to other facilities due to problems other than eye conditions or they could not be treated because of other factors, such as suspected HIV.

Total 2010 expenditures amounted to US$848,476. Staff costs comprised 45%, capital costs 25%, medical supplies 19% and the remaining 11% were utilities, insurance, land rental and general supplies. When subtracting diagnosis-specific medical equipment, medical supplies, specialized clinical staff and the proportion of the buildings occupied by inpatient wards, overhead costs amounted to US$542,428, or US$31 per patient event. These costs comprised US$14 for staff, US$8 for capital items, US$5 for medical

TABLE 1. Sociodemographic characteristics of study patients, Lusaka Eye Hospital, Zambia.

Characteristic	Cataract surgery, $n = 47$	Refractive error, $n = 43$	Total, $n = 90$
Female, %	40	63	51
Mean age, years (standard deviation)	62 (18)	34 (17)	49 (22)
In employment during past month, %	15	28	22
Received consultation once previously, %	26	37	31
Received consultation at least 2 times previously, %	6	5	6

TABLE 2. Source of funds to pay for eye health services at Lusaka Eye Hospital, Zambia.

Source (%)	Cataract surgery, $n = 47$	Refractive error, $n = 43$	All patients, $n = 90$
Relatives	37	30	33
Savings	17	53	34
Cheshire home	28	0	14
Borrowing	9	7	8
Selling assets	2	0	1
Cutting expenses	0	7	4
Employer	7	2	4

supplies, and US$4 for all other expenses. Surgery overhead costs amounted to US$21 per surgical patient, comprising US$12 for staff and US$9 for capital items.

Diagnosis Specific Costs

Cataract Surgery

The procedure used at LEH was extracapsular cataract extraction with posterior chamber intraocular lens implantation. One cataract operation takes approximately 15 minutes to perform, but 30 minutes of the ophthalmologist's time was allocated per surgery to allow for preparation. Supplies and equipment amounted to US$18 and costs of drugs administered post surgery were US$1.51 (95% CI US$1.23–2.46) per patient. From the perspective of LEH, mean costs per cataract surgery were US$88 (Table 3). When adding patient out-of-pocket costs for drugs and transport, total mean costs per cataract surgery amounted to US$128 (95% CI US$96–168) and the median was US$121. LEH has recently invested in phacoemulsification equipment to be used on high-cost patients. When including the costs of this equipment for all patients, LEH costs per surgery increased to US$144 per patient.

Refractive Error

Cost items of the spectacles manufacturing workshop included staff, equipment and supplies. Annual costs amounted to US$42,401 and the annual number of spectacles manufactured was approximately 2760. Hence, production cost per pair of spectacles was on average US$15. Other diagnosis-specific costs for refractive error were optometrist salaries, equipment and supplies, which amounted to US$21 per patient. When adding up overhead and diagnoses-specific costs, mean LEH costs per refractive error correction were US$67. When including out-of-pocket drugs and transport, total mean costs amounted to US$86 (95% CI US$67–118; Table 3), and the median was US$78 per patient.

TABLE 3. Mean costs per patient of eye health services at Lusaka Eye Hospital, Zambia.

Cost	Cataract surgery, $n = 43$	Refractive error, $n = 41$
Hospital costs, US$		
General overhead	31	31
Surgery overhead	21	NA
Diagnosis-specific equipment	8	1
Diagnosis-specific drugs and supplies	10	8
Diagnosis-specific staff	18	12
Spectacles manufacturing	NA	15
Subtotal	88	67
Patient out-of-pocket costs, US$ (95% CI)		
Drugs	23 (4–42)	2 (0–5)
Subtotal	110 (92–130)	69 (67–72)
Transport	17 (0–51)	18 (0–52)
Total	128 (96–168)	86 (67–118)

CI, confidence interval; NA, not applicable.

Comparison Between LEH Costs and User Fee Charges

The ''low-cost'' fee for cataract surgery was US$109 and the price of a pair of spectacles ranged between US$12 and US$164. This is compared to estimated LEH costs of US$88 for cataract surgery and US$67 for refractive error correction.

The registration fee per patient was US$6.34 (30,000 Kwacha) and the fee for a follow-up visit was US$4.11 (20,000 Kwacha). While this is considerably less than the mean overhead costs of US$31, the majority of patients also pay for treatments and supplies received during the consultation.

DISCUSSION

This is the first study to present cost estimates of cataract surgery and refractive error correction in an African setting. At LEH, which is a well-functioning non-profit facility with a relatively large patient load, mean total costs per cataract surgery and refractive error correction were US$128 (95% CI US$96–168) and US$86 (95% CI US$67–118), respectively. Hospital overhead costs, which included all activities needed for the overall running of the hospital, amounted to US$31 per patient consultation. Overhead costs can be cumbersome to collect and they are therefore not always fully included in treatment cost studies. However, their omission would lead to considerable underestimation of the true costs of health care interventions.

Only one study reporting the costs of refractive error correction was identified in the literature (Table 4). In India, it was found that costs per dispensed spectacles were US$16 with school eye screening delivery, and US$35 when correcting refractive error in primary care facilities.[11] Both of these estimates were thus considerably less than the US$69 per refractive error correction found at LEH when excluding transport costs. However, the study by Lester is brief, with no details about individual cost items, so it is not possible to explain the specific reasons for the differences.

There are considerably more studies available on the costs of cataract surgery, but the majority of these are from high-income countries (Table 4). Low-income country studies were only identified from India and Nepal, while estimates were available from two middle-income and 11 high-income countries.

TABLE 4. Mean costs of refractive error correction and cataract surgery in selected settings.

First author	Country	GDP per capita, 2010 US$	Year of data collection	Intervention	Mean cost per patient, 2010 US$
Refractive error correction					
Lester[11]	India	1375	2006	School screening	16
Lester[11]	India	1375	2006	Primary care	35
Cataract surgery					
Gogate[18]	India	1375	2002	MSI	25
Gogate[18]	India	1375	2002	ECCE	25
Muralikrishnan[19]	India	1375	2001	MSI	29
Muralikrishnan[19]	India	1375	2001	Phacoemulsification	43
Marseille[20]	Nepal	535	1992	ECCE	88
Singh[21]	India	1375	1997	ECCE NGO hospital	92
Singh[21]	India	1375	1997	ECCE mobile clinic	93
Singh[21]	India	1375	1997	ECCE teaching hospital	270
Jongsareejit[22]	Thailand	4614	2006	MSI	304
Jongsareejit[22]	Thailand	4614	2006	Phacoemulsification	351
Fattore[23]	Hungary	12,863	2005	Phacoemulsification	516
Fang[24]	China	4433	2009	Phacoemulsification, County hospital	536
Minassian[25]	UK	36,186	2000	ECCE	588
Minassian[25]	UK	36,186	2000	Phacoemulsification	584
Fattore[23]	Poland	12,303	2005	Phacoemulsification	767
Fattore[23]	Netherlands	46,497	2005	Phacoemulsification	811
Fattore[23]	Denmark	56,278	2005	Phacoemulsification	976
Fattore[23]	Spain	30,026	2005	Phacoemulsification	991
Fattore[23]	UK	36,186	2005	Phacoemulsification	1010
Sach[26]	UK	36,186	2004	Phacoemulsification	1135
Fattore[23]	Germany	39,852	2005	Phacoemulsification	1201
Fang[24]	China	4433	2009	Phacoemulsification, Union hospital	1293
Hiratsuka[27]	Japan	43,063	2009	Phacoemulsification	1313
Fattore[23]	France	39,170	2005	Phacoemulsification	1474
Fattore[23]	Italy	36,267	2005	Phacoemulsification	1762
Malot[28]	France	39,170	2010	Phacoemulsification	1915
Castells[29]	Spain	30,026	2001	Phacoemulsification	2261
Busbee[30]	USA	46,702	2000	Phacoemulsification	2882
Busbee[31]	USA	46,702	2001	Phacoemulsification	3126

GDP, gross domestic product; MSI, manual small incision surgery; ECCE, extracapsular cataract extraction; NGO, non-government organization

Comparison of costs across settings shows clear correlation with gross domestic product per capita, with the lowest costs in India and the highest in the USA. For countries with more than one study available, the estimates are generally slightly different, which is explained by diverse study facilities and methodologies. At LEH the mean cost per cataract surgery was US$110 when excluding transport costs. While this is higher than in most of the facilities in India and Nepal, it is less than in the Indian teaching hospital where the cost was US$270. It is also considerably less than in China and Thailand, which were the only estimates available from middle-income countries.

The costs of services from the perspective of LEH corresponded relatively well to the established user fee levels. The mean cost of cataract surgery was US$88 and the corresponding ''low cost'' user fee was US$109. The mean cost of refractive error correction was US$67, which should be compared to US$6 charged for an optometrist consultation and between US$12 and US$164 for a pair of glasses, with the most common price being around US$50. The user fee of US$6 per consultation for all types of conditions is considerably less than the overhead costs of US$31 and additional revenue is therefore collected from patients receiving more extensive services, such as cataract surgery.

The user fees charged at LEH allow only the relatively wealthy to access services. According to the Zambian living conditions survey, average monthly household income was approximately US$231 in 2010, but 57% of households had incomes below US$125.[12] Hence, the fees for cataract surgery and refractive error correction exceed or are close to the monthly household income, making it unaffordable for the large majority of the population. Other studies have shown that financial reasons are constraints for accessing eye care services.[13–15] However, according to the Zambia rapid assessment of avoidable blindness, the most common reasons for not having cataract surgery were unawareness of treatment (36%) and a belief that the condition was God's will (15%).[2] Only 3.8% stated that they did not access

surgery because they could not afford it. However, another 12% said that they could not get to the facility, possibly implying that transport costs are an important constraint and moreover, those who did not know about surgery would not have been able to answer the question about affordability.

Some caution should be exercised when extrapolating the LEH estimates to other settings and facilities. Costs may vary according to procurement systems, salary structures and productivity levels. In facilities with a lower patient load, mean cost per patient is likely to be higher due to lower economies of scale. The estimates presented in this study are representative of a relatively efficient facility delivering high quality services.

Cataract surgery and refractive error correction were the chosen syndromes because they are common reasons for seeking care and because their diagnosis-specific costs could relatively easily be identified. A more extensive study should present separate estimates for other diagnoses, such as conjunctivitis, glaucoma, corneal ulcer and conjunctival growth. However, cost valuations for chronic and recurring conditions require long-term patient monitoring and a number of assumptions for determining lifetime costs.

No other studies on the costs of eye care in Africa could be found in the published literature and only one study, which was from India, presented the costs of refractive error correction. Several surveys have shown that uncorrected refractive error is one of the most important causes of visual impairment in low-income settings. Refractive error caused 43% of moderate visual impairment in Pakistan, 57% in Nigeria and 29% in Zambia.[2,16,17] VISION 2020 strategies to eliminate uncorrected refractive errors include establishment of comprehensive eye care services that ensure availability of suitable correction tools at all levels, including during outreach activities.[5] Accurate cost estimates are crucial when planning for these activities and it is imperative that further studies are undertaken in a variety of settings using different delivery strategies.

DECLARATION OF INTEREST

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper.
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APPENDIX

1. Study Questionnaires

Socio-demographic questionnaire

Study identifier					
1.	Facility study ID	|__|__|	2.	Survey Number	|__|
3.	Questionnaire number	|__|__|__|			
Patient information					
4.	Patient ID number	_____	5.	Gender: Male Female	
6.	a) Date of birth		|__|__|day|__|__|month|__|__|__|__|year		
Socio-demographics					
7.	In the last month, did you have a job other than working in the field owned or rented by the household?	No Yes	8.	If yes, what is your job?	_____
9.	What is the highest level of education you completed?	_____			
10.	Marital status:	Married Single Divorced/separated Widowed			
11.	How many people live in your household?	|__|__|			

Wealth indicators

I am now going to ask you some questions about your household.

Dwelling		
14.	What is the major material of the roof?	Concrete/ shingles Asbestos/metal sheets Tile Wood Unbaked bricks Thatch Other (specify)_____
15.	How many rooms do the members of your household occupy?	|__|__|

18. Do you make regular payments for this dwelling in either money, goods or services?
No
Yes

19. If yes, what is the approximate value of these payments?

_____ZMK

Sanitation

20. What is the type of toilet in your household?

Flush toilet
Traditional latrine
Improved latrine with ventilation (VIP)
Other (specify)_____
No toilet

Household assets

22. Does your household own:

	No	Yes
Radio/HiFi stereo,	☐	☐
TV/VCR/DVD	☐	☐
Fridge/Freezer	☐	☐
Telephone/Cellular Phone	☐	☐
Cupboard	☐	☐
Sofa set/armchair	☐	☐
Sewing machine	☐	☐
Table	☐	☐
Bicycle	☐	☐
Motor vehicle, including cars	☐	☐
Motorbike	☐	☐
Washing machine	☐	☐

24. How many of the following animals does your household own?

Cows |__|__|__|
Goats |__|__|__|
Chicken/ducks |__|__|__|
Pigs |__|__|__|

Household expenses

25. In the past 7 days, has any member of your household spent money on any of the following items?

If yes, how much for each?

	0=No	**1=Yes**	**ZMK**
Tobacco, cigarettes, cigars	☐	☐	
Newspapers or magazines	☐	☐	
Lottery tickets	☐	☐	
Fares for busses, trains, taxis, etc.	☐	☐	
Petrol, oil and car service	☐	☐	
Alms, charity	☐	☐	

26. On a scale of 1 to 10, how well-off do you think your household is in relation to the other households in the village?

|__|__|__|

2. Patient treatment cost questionnaire

Pre hospitalisation costs

1. Before visiting this facility, did you seek help for your eye problem from any other source?
Yes
No (proceed to question 2)

If yes, how long did it take to get to each facility and how much did it cost you for drugs, tests, consultation, transportation and other money spent? *(Respondent to list all the facilities, then ask the costs of each item for each place visited one at a time)*

Pre hospitalisation treatment seeking and payment table:

	Type 1	Type 2	Type 3	Type 4	Type 5
10.1 What sort of treatment? (code)					
10.2 What transport? (code)					
10.3 Travel time from home to facility (min)					
10.4 Approximate distance covered (km)					
10.5 Transportation costs (ZMK)					
10.6 Duration of stay for inpatient care (days)					
10.6 User fees charged (ZMK)					
10.7 Extra drug costs (ZMK)					
10.8 Extra test costs (ZMK)					
10.9 Any other payments (ZMK)					
Treatment code: 1= hospital outpatient; 2= hospital inpatient; 3= pharmacy; 4 = shop; 5 = traditional healer; 6= other (specify) _____					
Transport code: 1 = public transport; 2 = on foot; 3 = self-driven car					

Costs of travel to this hospital today

2. How long did it take to get here from your home (*include the journey time and any waiting for transport*)

   Minutes |__|__|
   Hours |__|__|
   Unknown |__|__|__|

3. What kind of transport did you use to reach this hospital?

   Walking (go to Q15)
   Public transport (go to Q13)
   Self-driven car (go to Q14)

4. If you paid for transportation to reach the hospital, how much did you pay?

   ZMK _____

5. If you used a private car to get to hospital, please estimate the distance travelled. (*if unable to estimate indicate residence*)

   Kilometres |__|__|
   Residence _____

6. How many of your relatives/acquaintances accompanied you to the hospital today?

   |___|___|
   (put 0 if none)

7. Did they use the same means of transport you used?
   Yes
   No

   If no, specify type and cost of transport:

   Type _____

   ZMK _____

   Transport code: 1 = public transport; 2 = on foot; 3 = self-driven car

Costs incurred at the hospital

8. How much did the household pay for the care given?

Item	User fees	Drugs	Tests	Other fees	Total
Payment made: (*put 0 if no payment and 999 if don't know;888 if NA*)					
Outstanding payments:					

9. Where did the money come from to pay these expenses? (multiple responses allowed)

   Cutting down on other expenses
   Using savings
   Borrowing to pay back
   Selling assets
   Asking for donations
   Others, specify

10. If you weren't here today, what would you be doing? (Multiple responses allowed)

    Unpaid work at home
    Paid work
    Other (specify) _____