Discontinuation of cost sharing in Uganda

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Objective To assess the effects of ending cost sharing on use of outpatient services and how this was perceived by health workers and members of a health unit management committee.

Methods From 10 districts across Uganda, 78 health facilities were selected. Attendance at these facilities was assessed for eight months before and 12 months after cost sharing ended. The data represented 1 966 522 outpatient visits. Perceptions about the impact of ending cost sharing were obtained from the 73 health workers and 78 members of the health unit management committee who were available.

Findings With the end of cost sharing, the mean monthly number of new visits increased by 17 928 (53.3%), but among children aged <5 years the increase was 3611 (27.3%). Mean monthly reattendances increased by 2838 (81.3%) among children aged <5 years and 1889 (24.3%) among all people. Attendances for immunizations, antenatal clinics, and family planning all increased, despite these services having always been free. Health workers reported a decline in morale, and many health unit management committees no longer met regularly.

Conclusion Use of all services increased — even those that had never before been subject to fees. The loss of some autonomy by the health facility and diminished community governance of health facilities may have long term negative effects.

Keywords Ambulatory care/economics; Cost sharing; Health services/utilization; Health services accessibility; Pharmaceutical preparations/supply and distribution; Uganda (source: MeSH, NLM).

Mots clés Soins ambulatoires/économie; Partage coût; Services santé/utilisation; Accessibilité service santé; Préparations pharmaceutiques/ressources et distribution; Ouganda (*source: MeSH, INSERM*).

Palabras clave Cuidados ambulatorios/economía; Seguro de costos compartidos; Servicios de salud/utilización; Accesibilidad a los servicios de salud; Preparaciones farmacéuticas/provisión y distribución; Uganda (*fuente: DeCS, BIREME*).

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Voir page 194 le résumé en français. En la página 194 figura un resumen en español.

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Introduction

Cost sharing, or user fees, have been an approach used by public sector health services in developing countries to recover some of the costs of services. Cost recovery was promoted by the World Bank and others to help bring expenditures into line with revenues (1, 2). No acceptable scheme, however, can recover other than a small portion of actual costs. The Bamako Initiative (1987) was one approach that promoted community financing of health services through a revolving drug fund (3). Success depended heavily on local management capacity and continuing central support for salaries and equipment (4). More commonly, set fees were introduced for services, sometimes called the "standard model" (5).

In Kenya, charges for treatment rather than for registration were more acceptable to the community, as long as preparation was adequate (6). User fees work best as a part of a larger process that includes quality improvement and some element of community risk-sharing — not just revenue generation (5). Equity, and specifically access for the poor, has been a major

concern with cost sharing. Common exemption methods include geographic targeting of poverty affected areas, community issued certificates, means testing through wage records, and exemption decisions at the point of service (7). For most African countries, implementation of effective exemption criteria for the poor, while limiting the leakage of benefits to the non-poor, is difficult.

Cost sharing and utilization

In Kenya, introduction of fees resulted in a decrease of outpatient attendance by 27% at provincial hospitals, 46% at district hospitals, and 33% at health centres (7). In Zambia, outpatient attendances dropped by 35% after fees were introduced, however, admissions to inpatient facilities remained fairly constant (8). In Ghana, a 40% decrease in outpatient attendance was noted after fees were introduced (9).

Few reports consider how removal of user fees affects use of services. In Kenya, outpatient attendances at three regional and four provincial hospitals rose to levels similar to those

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pre-implementation after registration fees were suspended (7). In South Africa, fees for children aged <6 years and pregnant women were eliminated in 1994, and all charges for primary health care services were eliminated in 1997. Attendance for curative services in the Hlabisa health district nearly doubled after fees were discontinued, but attendance for antenatal and children's services continued to decline (10).

Health services in Uganda

At the end of the 1980s, Uganda emerged from two decades of political and social upheaval with an underequipped and understaffed health service (11). Cost sharing was introduced in public facilities shortly after decentralization in 1993. The intention was to lessen the impact of irregular payment of low health worker salaries, alleviate drug shortages, and strengthen community management of facilities. In some areas, guidelines and training for cost sharing management were developed (12). Some communities set their own fees and managed revenues. Fees were usually US\$ 0.25-0.45 per new visit. In Kabarole district, cost sharing reduced outpatient attendance by 21.3%, but at remote facilities, utilization increased (13). Both health workers and community members viewed the cost-sharing strategy as successful (14). Usually, the health unit management committee (HUMC), elected from the community, decided allocation of cost-sharing revenues. Up to half of funds supplemented health worker salaries, and the balance was used to clean and maintain the facilities and purchase additional drugs and supplies. The cost-sharing supplement could equal 50-150% of a worker's regular salary.

With the 2001 election campaign, President Museveni abolished cost sharing in the public sector, and fees were stopped in March 2001. This was influenced by a report that cost sharing was leading to unnecessary suffering and even death (13). To compensate for the loss of cost-sharing revenue and potential consequence on drug availability, the Ministry of Health introduced a supplemental buffer fund of 7 billion Uganda shillings (US\$ 5.5 million) from the World Bank-supported district health services project (DHSP). This represented an increase of 22% to the ministry's drug budget for 2001.

Abolition of cost sharing was intended to improve access to health services for the poor, as 46% of Uganda's population earn less than US\$ 1 per day and 60% of households have a monthly income under US\$ 50 (15).

We have been monitoring the Integrated Management of Childhood Illness (IMCI) approach in 10 districts (population 5.7 million) since 1999 (Fig. 1). We undertook a study in 2002 to assess how the end of cost sharing would affect use of IMCI services. The IMCI impact study, of which this study forms a part, received ethical approval from the Uganda National Council for Science and Technology and the Johns Hopkins School of Public Health Committee on Human Research.

Methods

We selected 80 clinics from the primary health care units in the 10 districts. Eight health centres in each district were selected randomly from a stratified listing of health facilities according to size. Three were selected from among HC2 units (outpatient services), three from HC3 units (outpatient plus maternity), and two from HC4 units (outpatient, maternity, inpatient, and a medical officer). Of the 80 clinics, 72 were public sector facilities and eight were nongovernmental units.

In Uganda, nongovernmental facilities received government support but had their own source of drugs. Most health facilities studied were rural; a few were in periurban sites. Data were available from 78 clinics, as two were closed. Data came from the facility records. Questions were developed by the research team at the Institute of Public Health of Makerere University, with input from the Ministry of Health and district health managers. Questionnaires for key informants were pilot tested and modifications made.

For each facility, the most senior health worker present and the most senior member of the HUMC available provided perceptions about clinic operations after abolition of cost sharing. Interviews lasted about 45 minutes. At 73 facilities, health workers were present who knowledgeably answered most if not all questions about the function of the unit. One or more members of the HUMC were present at 78 sites. Interviews and reviews of records were conducted by the research team. Key informant interviews used questions for health workers and for members of the HUMC that were similar but not identical. Responses were recorded in writing by the research team. Data for attendance were available for the eight months before and 12 months after cost sharing ceased. No unique identifiers were recorded, and names of the health facilities were deleted after data entry. The research team did not know members of the HUMC, but they did know some of the health workers.

Results

During the 21 months of this study, 1 966 522 visits were made to the 78 facilities in the 10 districts. Of 934 119 new visits, 322 447 (34.5%) were for children aged <5 years. Among the 187 559 patients who reattended, 106 853 (56.9%) were children aged <5 years. New visits are shown by month in Fig. 2.

All people approached agreed to participate. Among the 73 health workers, 32 (44%) were men. Of those interviewed, 20 were nurses, 17 clinical officers, 14 midwives, 10 nursing assistants, two medical officers, and 10 from other categories. Most health workers had spent at least two years in their present location, and 21 (29%) had been there for more than five years.

Attendance

Table 1 shows the mean monthly attendance figures for the 78 health facilities during the eight months before and 12 months after the abolition of cost sharing in March 2001. After cost sharing was abolished, the mean number of monthly new visits at the 78 facilities for all people increased by 17 928 (53.3%): from 33 653 visits a month during cost sharing to 51 581 per month after cost sharing ceased (March 2001 is excluded from calculations). The increase for children aged <5 years was 3611 (27.3%): from 13 204 to 16 815. After cost sharing, the workload for health workers increased by 46.9%: from an average of 446 new cases per month to 655. Among children aged <5 years, however, the number of new visits increased by 19.5% from an average of 190 per month during cost sharing to 227 after abolition. Although IMCI-trained health workers saw more children during cost sharing, the increase in the numbers after cost sharing ended was not significantly greater than the increase among non-IMCI trained health workers. After the end of cost sharing, immunizations each month for children aged <5 years increased by 17.2% — although these were free before cost sharing ceased. Over the same time, antenatal visits increased by 25.3% from 7133 to 8938 per month. For another free service — family planning — the increase was 472 per

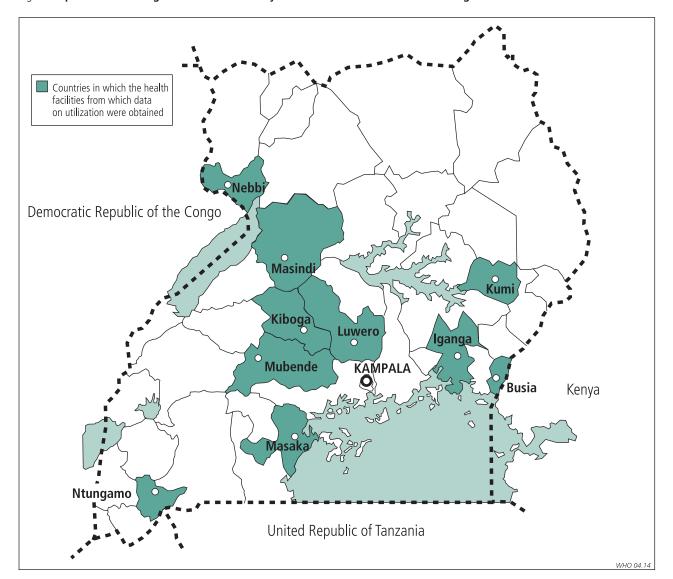


Fig. 1. Map of districts in Uganda included in study of effects of abolition of cost sharing

month (32.3%). Reattendances also increased. For all persons this was 1889 visits a month or 24.3%, but for children under 5 it was 2838 (81.3%).

Perceptions of health workers

At the 78 facilities, we interviewed 73 health workers who had worked in the units for at least six months before the end of cost sharing (Table 2). Not all health workers felt they could knowledgably answer every question. With the end of cost sharing, 54 (73.9%) health workers felt that people had better access to health services, especially the poor. Improved drug supply was noted by 17 (23.6%) health workers. The major negative effects noted were the lack of supplementary funds to buy essential drugs (29, 39.7%) or to supplement support staff, particularly those not on the central payroll (39, 53.4%). Most health workers felt that after cost sharing had ended neither the mix of illnesses among patients (57, 78.1%) nor the age of patients who paid visits (51, 69.9%) changed. Health workers felt that they had a more negative attitude toward their work after cost sharing ended (40, 66.7%).

Drug supply was felt in general to be not worse after than during cost sharing, except for nalidixic acid, gentamicin, and

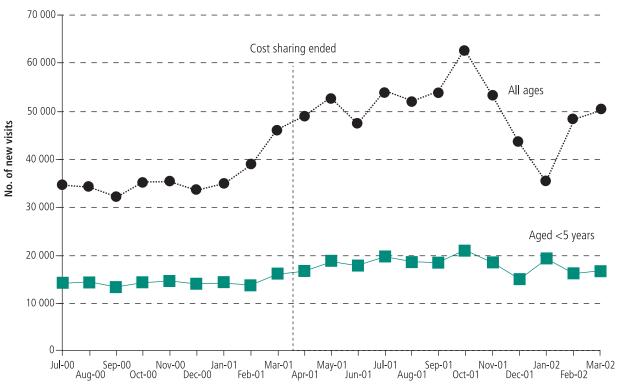
amoxicillin, which were judged less available. Among equipment and supply items, health workers said the supplies of mothers' cards (22, 32%) and syringes and needles (37, 51.4%) were less available (data not shown). Cleanliness and maintenance of the facilities were thought worse than during cost sharing by a third or more of health workers. Outreach services were felt to be the same or better by 69 (96%) (data not shown). Health workers noted that the HUMC was meeting infrequently or not at all after cost sharing ceased and felt that central government was taking a larger role in the management of health units.

Perceptions among members of the health unit management committee

Most of the 78 members of the HUMC interviewed had served on the committee for at least four years or more, and 71 (90.9%) had lived in the adjacent community for more than five years. A third of those interviewed were committee chairpeople and three-quarters were men. Most (60, 77.8%) had been trained for their HUMC duties.

Committee members generally were able to answer all questions, although some did not know specific answers for certain aspects of clinic functions. The main positive benefit of

Fig. 2. New attendances in people of all ages and children < 5 years between July 2000 and March 2002



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the abolition of cost sharing mentioned was a greater access to services, especially for poor people (52, 71.2%). Easier availability of drugs was volunteered by only 11 (15.1%) committee members. Drugs were noted to more easily available at facilities that reported decreased attendance, and these were often nongovernmental units. Members of HUMC felt that the absence of cost-sharing funds reduced availability of essential drugs (44, 60%) and support for ancillary clinic staff (45, 62%). Decreased morale among health workers after cost sharing ceased was cited by 22 (30%) HUMC members. Members agreed that no changes in the age composition of the patients or the mix of diseases had occurred. Most felt that the health worker in charge of the clinic now spent the same amount of time or more time at the clinic than before. They thought attitudes among the workers in charge and other clinic workers had not deteriorated appreciably. Only the cleaning services and maintenance of the clinic were seen to have worsened substantially. Members of the HUMC reported that they rarely if ever met after cost sharing ceased.

Discussion

At the time many developing countries were turning to cost sharing as a method to bridge deficits in health budgets, many reports documented the effects of fees on service utilization, particularly among poor people. Few reports have documented how discontinuation of cost sharing affects service utilization.

We found that perceived quality of services did not seem to suffer and that drugs and medical supplies were perceived generally to be available after cost sharing ceased. The Ministry of Health was able to quickly create a US\$ 5.5 million buffer fund to supply additional drugs to facilities. Improved access by the poor was the major positive effect of the end of cost sharing that was cited by both health workers and community leadership. Perceptions of drug availability at times seemed inconsistent, perhaps because although some drugs were readily available, others were in short supply. Most health workers and HUMC members felt drug supplies were the same or reduced. Health workers at government facilities tended to perceive drug availability as worse than health workers at nongovernmental organizations' facilities. Some health workers and HUMC members, mainly at nongovernmental organizations' units, felt drug availability had increased. This is not surprising, as nongovernmental organizations' units generally continued fees as public sector facilities became free, which reduced utilization of nongovernmental organizations' facilities. The shortage of essential drugs was seen as less of a problem by health workers than by HUMC members. This may be explained by variations in perceptions among the health facilities and across districts. Several health facilities reported that, although drugs were readily available, the supplies lasted for a shorter period of time because of increased utilization; shortages of antibiotics were perceived by health workers to be more common. Vitamin A, oral rehydration salts, and antimalarials were thought to be more available after cost sharing ended. Overall, for most drugs, health workers presented a mixed picture of availability: the same or less.

The success of the transition from a cost-sharing system speaks well for the Ugandan health workers who seemed to continue fulfilling professional responsibilities in spite of a loss of income from cost-sharing revenue. Health workers may, in the long term, shift more of their time to their private clinics to compensate, thus shortening the opening hours of government clinics. This is likely to be the case if salary payments become

Table 1. Use of health services in 78 health facilities from 10 districts for eight months before and 12 months after cost sharing ended

| | New visits | | Mean patients seen per health worker | | Reattendance at clinics | | | | | |
|--------------------------------|-------------------------|--|---|---|----------------------------|-------------|------------------------------|-----------------------------|---|---------------------------------------|
| | | | | Aged <5 | years | | | | | |
| Month | Total people seen | Total children aged <5 years seen | All ages | Non-IMCI ^a health worker | IMCI health worker | All ages | Children aged <5 years | Total immuni- zations | Total attendances at antenatal clinics | Total family planning visits |
| 2000 | | | | | | | | | | |
| July | 34 688 | 13 491 | 444 | 181 | 211 | 8825 | 3634 | 30 517 | 7599 | 1475 |
| August | 34 369 | 13 655 | 440 | 184 | 222 | 7281 | 3645 | 30 781 | 7651 | 1633 |
| September | 22 157 | 12 575 | 412 | 169 | 199 | 6880 | 3202 | 28 728 | 6624 | 1430 |
| October | 35 183 | 13 462 | 451 | 182 | 209 | 7281 | 3410 | 29 212 | 7397 | 1593 |
| November | 35 396 | 13 811 | 453 | 187 | 219 | 8534 | 3843 | 26 639 | 7152 | 1519 |
| December | 33 596 | 13 133 | 430 | 117 | 210 | 7438 | 3304 | 24 391 | 6033 | 1281 |
| 2001 | | | | | | | | | | |
| January | 34 922 | 13 402 | 447 | 180 | 210 | 8106 | 3671 | 25 249 | 7962 | 1417 |
| February | 38 909 | 12 095 | 490 | 171 | 190 | 7826 | 3204 | 26 648 | 6646 | 1341 |
| Marchb | 45 923 | 15 038 | 588 | 203 | 224 | 9465 | 3001 | 27 353 | 7108 | 1365 |
| April | 48 962 | 15 628 | 627 | 209 | 218 | 7152 | 2552 | 28 310 | 7538 | 1501 |
| May | 52 394 | 17 386 | 671 | 235 | 250 | 8606 | 3376 | 31 050 | 8536 | 1697 |
| June | 47 177 | 16 595 | 604 | 224 | 239 | 8703 | 3829 | 31 593 | 7577 | 1657 |
| July | 53 697 | 18 565 | 688 | 247 | 269 | 10 572 | 7807 | 32 458 | 10 069 | 1941 |
| August | 51 763 | 17 232 | 655 | 229 | 234 | 11 748 | 8609 | 34 073 | 9534 | 1998 |
| September | 53 435 | 17 246 | 676 | 227 | 232 | 12 954 | 9202 | 32 223 | 8941 | 1923 |
| October | 61 855 | 19 766 | 782 | 260 | 255 | 13 010 | 9383 | 38 226 | 9308 | 2141 |
| November | 52 621 | 17 197 | 666 | 226 | 231 | 9833 | 7350 | 34 710 | 9012 | 1905 |
| December | 43 227 | 13 861 | 547 | 183 | 187 | 7721 | 6485 | 27 452 | 7989 | 2136 |
| 2002 | | | | | | | | | | |
| January | 56 260 | 17 980 | 712 | 237 | 238 | 9311 | 6373 | 32 085 | 10 263 | 2250 |
| February | 47 741 | 14 859 | 604 | 196 | 203 | 7303 | 5191 | 34 287 | 9388 | 2031 |
| March | 49 844 | 15 470 | 630 | 203 | 211 | 9010 | 5782 | 34 171 | 9107 | 2020 |
| | -sharing v | isits per mor | nth⁵ | | | | | | | |
| July 2000— February 2001 | 33 653 | 13 204 | 446 | 171 | 209 | 7771 | 3490 | 27 771 | 7133 | 1461 |
| April 2001– March 2002 | 51 581 | 16 815 | 655 | 223 | 231 | 9660 | 6328 | 32 553 | 8939 | 1933 |

 $^{^{\}rm a}$ IMCI = Integrated Management of Childhood Illnesses.

irregular again. Although health services are decentralized to districts, the central government has recentralized payment of all health workers because of irregular salary payments by local government.

The service utilization data show an interesting pattern after the end of cost sharing. Although new visits for all ages increased by 53.3%, the increase among those aged <5 years was 27.3%. This could suggest that children were being taken to clinics for serious illnesses before the end of cost sharing, so removal of cost sharing made little difference. It might also mean that barriers other than user fees, such as transportation or lack of trust, impeded access. The intra-household decision-making process for care seeking may be different for older children and adults than for children aged <5 years.

We did not set out to measure utilization at other types of facilities in these districts. Some health workers, however, felt that the increased utilization of public sector facilities represented a shift from nongovernmental organization and private practices.

In contrast with the rather flat trend for new cases of children aged <5 years after cost sharing (27.3% increase), the number of children aged <5 years who reattended after the initial visit increased by 81.3%. For all patients, this increase in reattendance was only 24.3%. Follow-up visits for children for continued symptoms or complications, which the IMCI approach emphasizes, may have been easier when they were free. The picture may be less clear than it would otherwise seem, as health facilities often have problems separating new and follow-up visits in their records.

The figures for new visits among children aged >5 years could suggest that the much larger surge in adult attendance represents utilization for minor conditions. Most health workers,

b Values for March 2001, the month during which cost sharing was eliminated, are not included in calculations of mean attendances or changes in utilization.

Table 2. Opinions of health workers and members of the health unit management committee on the effects of abolition of cost sharing on specific health facility activities.

| | Health workers ^a | | Members of health unit management committee ^b | | |
|--|-----------------------------|---------------------------------------|---|---|--|
| Opinion | All respondents | Respondents agreeing with opinion (%) | All respondents | Respondents agreeing with opinion | |
| Positive effects of cost-sharing abolition ^c | | | | | |
| Easy access to health services even by the poor | 73 | 54 (73.9) ^d | 73 | 52 (71.2) | |
| Improved drug supply | 73 | 17 (23.6) | 73 | 11 (15.1) | |
| Increased central government control and financing | 73 | 5 (6.8) | 73 | 5 (6.8) | |
| Coming to clinic early in disease course | 73 | 5 (6.8) | 73 | 2 (2.7) | |
| Other | 73 | 11 (15.1) | 73 | 10 (13.7) | |
| Negative effects of cost-sharing abolition ^c | | | | | |
| Inadequate availability of essential drugs | 73 | 29 (39.7) | 73 | 44 (60.0) | |
| Lack of salary supplement for health staff | 73 | 39 (53.4) | 73 | 45 (62.0) | |
| Low morale among health workers | 73 | 10 (13.7) | 73 | 22 (30.2) | |
| Other | 73 | 19 (8.2) | 73 | 12 (16.4) | |
| Reason for increased utilization | | | | | |
| Increased availability of drugs | 55 | 37 (67.3) | 51 | 3 (5.9) | |
| Access by all persons | 55 | 5 (9.1) | 51 | 46 (90.2) | |
| Other | 55 | 13 (23.6) | 51 | 2 (3.9) | |
| Effects of abolition of cost-sharing on types of | | | | | |
| illnesses presenting | | | | | |
| Disease pattern has changed | 73 | 12 (16.6) | 77 | 9 (11.7) | |
| Disease pattern has not changed | 73 | 57 (78.1) | 77 | 59 (76.6) | |
| Other | 73 | 4 (5.4) | 77 | 0 | |
| Effects of abolition of cost-sharing on age of | | | | | |
| patients coming | | | | | |
| Patients now are older | 73 | 8 (10.9) | 77 | 3 (3.9) | |
| Patients now are younger | 73 | 5 (6.8) | 77 | 14 (18.2) | |
| Patient age is unchanged | 73 | 51 (69.9) | 77 | 48 (62.3) | |
| Effect of abolition on attitude of the in-charge | | | | | |
| Attitude improved | | | 74 | 9 (12.2) | |
| Attitude unchanged | | | 74 | 43 (58.1) | |
| Negative attitude | | | 74 | 12 (16.2) | |
| Effects of abolition on health worker attitude | | | | | |
| Attitude improved | 60 | 5 (8.3) | 70 | 7 (10.0) | |
| Attitude unchanged | 60 | 15 (25) | 70 | 36 (51.4) | |
| Negative attitude | 60 | 40 (66.7) | 70 | 20 (28.6) | |
| | | | | | |
| Amount of time in-charge worker spends in facility after abolition | | | | | |
| Time increased | | | 76 | 24 (31.6) | |
| Time the same | | | 76 | 29 (38.2) | |
| Time decreased | | | 76 | 16 (21.1) | |
| Conoral availability of drugs and supplies | | | | , , | |
| General availability of drugs and supplies Increased | 71 | 41 (57.7) | 74 | 27 (36.5) | |
| Same as before | 71 | 9 (12.7) | 74 | 10 (13.5) | |
| Reduced | 71 | 21 (29.6) | 74 | 31 (41.9) | |
| | | (_5.5) | | - () | |
| Equipment availability Increased | 60 | 26 (42 2) | 66 | 24 (26 4) | |
| Same as before | 60 | 26 (43.3) 20 (33.3) | 66 | 24 (36.4) 18 (27.3) | |
| Reduced | 60 | 20 (33.3) | 66 | 20 (30.3) | |
| | | 25 (50.5) | | 20 (30.3) | |
| Availability of services ^e | 67 | 27 /40 2) | 70 | 22 /45 7 | |
| Increased | 67 | 27 (40.3) | 70 70 | 32 (45.7) | |
| Same as before Reduced | 67 67 | 19 (28.4) | 70 70 | 18 (25.7) | |
| neuuceu | 0/ | 20 (29.9) | 70 | 20 (28.6) | |

(Table 2, cont.)

| | Health w | orkers ^a | Members of health unit management committee ^b | | |
|------------------------------|-----------------|---------------------------------------|---|---|--|
| Opinion | All respondents | Respondents agreeing with opinion (%) | All respondents | Respondents agreeing with opinion | |
| Meetings of the HUMC | | | | | |
| Increased | 71 | 5 (7.0) | 77 | 8 (10.4) | |
| Same as before | 71 | 12 (16.9) | 77 | 23 (29.9) | |
| Reduced | 71 | 20 (28.2) | 77 | 22 (28.6) | |
| Greatly reduced | 71 | 20 (28.2) | 77 | 11 (14.3) | |
| Not meeting at all | 71 | 10 (14.1) | 77 | 9 (1.7) | |
| Other activities of the HUMC | | | | | |
| Increased | 62 | 9 (14.5) | | | |
| Same as before | 62 | 12 (19.4) | | | |
| Decreased | 62 | 41 (66.1) | | | |

- ^a 73 health workers participated. Not all health workers interviewed were knowledgeable about a particular question. The percentage shown for each question is calculated on the number of respondents who felt able to answer that question, which varied from 51 to 73.
- ^b 78 members of the HUMC participated. Not all HUMC members interviewed were knowledgeable about a particular question. The percentage shown for each question is calculated on the number of respondents who felt able to answer that question, which varied from 51 to 77.
- ^c More than one answer possible.
- ^d Values in parentheses are percentages.
- ^e Cleaning, maintenance, outreach services, hours, transport, and staff allowances.

however, felt that after the end of cost sharing, no change was seen in the case mix of patients who attended.

The causes for the dramatic decrease in attendance after October 2001, seven months after cost sharing was abolished, are unclear. The perception among health workers and community members was that the additional drug stocks made available at the end of cost sharing were exhausted. As we did not assess drug stocks, we were unable to confirm this. Although this decrease was mirrored in new visits of those aged <5 years, the decrease was smaller. If anecdotal accounts that the attendance drop was due to reduced drug availability are true, the perceived presence of drugs may be less of an important factor in health seeking for children than for adults.

The number of immunizations given and attendance for antenatal and family planning services also increased, although these services were free both before and after cost sharing. Perhaps increased attendance for curative services created more referrals within the facility for these services, or a greater awareness. This underscores the importance of integrating services at the facility level. These findings are in contrast with the decline in utilization of preventive services noted in the Hlabisa district of South Africa after cost sharing ended there (10).

That health services became free to the patient with the end of cost sharing should not be assumed. Informal "underthe-table" payments to health workers are a feature of many nominally free health services and were an acknowledged practice in Uganda before cost sharing. Payments to health workers may have returned after cost sharing ended, although this study was not designed to assess this. The possible return of informal payments may be reflected by the uncertain effect of the abolition of cost sharing on the perceived morale of health workers. Those who would certainly be worse off without cost sharing would be the non-skilled staff who received some cost-sharing funds but would be less likely to access informal payments. Although health workers themselves said their attitude toward their work had deteriorated, most HUMC members did not

note any changes. The long-term morale of health workers should be monitored. A certain degree of autonomy, as well as some level of authority to go with their prescribed autonomy, is an important contributor to morale at the facility level. The end of cost sharing has curtailed this substantially, as well as the nascent health worker links with the community formed through participation in the HUMC.

A major reason for this reversion to free services has been community governance of health facilities. One of the great strengths of Uganda's cost-sharing approach was retention of funds by the community in which they were collected and creation of a community governance mechanism to oversee allocation. The HUMC could be argued to have been self serving, with personal gain from taking part. Many HUMC members may have seen their job mainly as managing cost-sharing funds, which would explain why committees have largely stopped meeting. Although this may be true, that some alternate method was not introduced to preserve this first entrance of community governance into the health system is unfortunate. Accountability of the health worker now seems to be moving away from the community back to the health system.

This study was limited to some extent by reliance on health worker and HUMC perceptions, when more objective data, had it been available, might have given a different picture. This is particularly true with respect to drug stocks and maintenance of health facilities. The limited resources available did not allow us to survey a representative sample of end users.

This study has several potential areas of bias. The health facilities chosen, despite the stratification used, may not have represented truly the districts as a whole, and the 10 districts included may not have been representative of Uganda's 56 districts. The research team, despite their experience and training, may have influenced responses. The number of "don't know" responses, particularly from the HUMC members may have resulted in an unrepresentative finding for some questions.

Both health workers and HUMC members have lost personal benefits from cost sharing; this clearly could have influenced their responses.

Conclusion

Utilization data from the first 12 months of free services are encouraging, especially with the infusion of drugs into the system. The difficulties of the public sector with respect to drug supplies make these services vulnerable when emergency buffer funds are exhausted. This is important as Uganda now moves from a predominantly "push" system of pre-packed kits for health centres to a "pull" system based on drug requisitions.

The study shows that elimination of cost sharing increases service utilization — more so for adults than for children. From the rate of visits per year, however, health services provided by the public sector and nongovernmental organizations are underused in these districts.

During the first eight months of this study, cost sharing brought in an estimated US\$ 28 042 to these 78 local health facilities, assuming a cost of US\$ 0.25 per visit. The loss of these discretionary funds, and particularly the sense of autonomy and community governance that went with this, may be seen by policy makers as a reasonable trade-off for increased access. It would be better to have both responsibility to communities and access.

Conflicts of interest: none declared.

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Résumé

Abandon de la participation aux frais en Ouganda

Objectif Evaluer les incidences de l'arrêt de la participation aux frais sur la fréquentation des services de consultation externe et sur l'opinion à ce sujet des agents de santé et des membres des comités de gestion des services de santé.

Méthodes Soixante-dix-huit établissements de santé ont été choisis dans 10 districts en Ouganda. Pendant les 8 mois qui ont précédé l'interruption de la participation aux frais et les 12 mois qui ont suivi, on a mesuré le nombre des visites dans ces services. Au total, 1 966 522 consultations externes ont été enregistrées. Les 73 agents de santé et les 78 membres des comités de gestion des services de santé disponibles ont été invités à donner leur opinion sur les effets de l'abandon de la participation aux frais.

Résultats L'arrêt de la participation aux frais a été suivi d'une augmentation mensuelle moyenne de 17 928 (53,3 %) premières consultations et de 3611 (27,3 %) premières consultations chez les enfants < 5 ans. Le nombre mensuel moyen des malades revenus pour une nouvelle consultation a augmenté de 1889 (24,3 %) et celui des nouvelles consultations chez les enfants < 5 ans de 2838 (81,3 %). Les consultations pour une vaccination, une visite prénatale ou des conseils de planification familiale ont toutes augmenté alors qu'elles ont toujours été gratuites. Les agents de santé ont déclaré que leur moral avait baissé et de nombreux comités de gestion des services de santé ont cessé de se réunir régulièrement.

Conclusion La fréquentation de tous les services a augmenté – y compris ceux qui n'ont jamais été payants. La perte d'autonomie des services de santé et la part réduite de la communauté dans la gestion des services de santé pourraient avoir des incidences défavorables à long terme.

Resumen

Suspensión de la compartición de costos en Uganda

Objetivo Evaluar los efectos de la suspensión de la compartición de costos en el uso de los servicios de ambulatorio, así como la percepción de esa medida por parte del personal de salud y de los miembros del comité de gestión de los puestos de salud.

Métodos Se seleccionaron 78 establecimientos de salud de 10 distritos de Uganda y se evaluó la asistencia a dichos establecimientos durante los ocho meses anteriores a la interrumpción de la compartición de costos y los 12 meses posteriores a la misma. Los datos reflejan 1966522 consultas externas. La percepción sobre el impacto de la medida se determinó sondeando a los 73 trabajadores de salud y los 78 miembros de los comités de gestión de los puestos de salud que estaban disponibles.

Resultados Tras suspender la compartición de costos, el número medio mensual de nuevas visitas aumentó en 17 928 (53,3%), pero entre los menores de 5 años el aumento fue de 3611 (27,3%). La media mensual de repeticiones de visitas aumentó en 2838 (81,3%) entre los menores de 5 años, y en 1889 (24,3%) entre todas las personas. El número de visitas a los servicios de inmunización, los consultorios de atención prenatal y los servicios de planificación familiar aumentó en todos los casos, pese a que esos servicios habían sido siempre gratuitos. El personal sanitario refirió un deterioro del espíritu de trabajo, y muchos comités de gestión de los puestos de salud dejaron de reunirse regularmente.

Conclusión El recurso a todos los servicios considerados aumentó, incluso en los casos en que antes no se exigía el pago de honorarios. La pérdida de parte de la autonomía de los centros de salud y la más deficiente administración comunitaria de los mismos podría tener efectos perjudiciales a largo plazo.

ملخص

إنماء العمل بنظام المشاركة في تكاليف الخدمات الصحية في أوغندا

(أي بنسبة ٣٨٠٪)، أما بين الأطفال الأقل من عمر ٥ سنوات فكانت السزيادة بنحو ٣٦١١ زيارة (أي بنسبة ٣٧٧٪). كما ازداد العدد المتوسط للزيارات الشهرية المتكررة للأطفال الأقل من عمر ٥ سنوات بنحو ٢٨٨٨ زيارة، (أي بنسبة ٢٨٨٨)، ولعامة الناس بنحو ١٨٨٩ زيارة (أي بنسبة ٣٤٠٪). كما ازداد معدل التردد على عيادات التطعيم والرعاية قبل الولادة وتنظيم الأسرة، بالرغم من أن هذه الخدمات كانت وما تزال تقدم مجاناً. وبيَّن تقصي آراء العاملين الصحيين انخفاضاً في روحهم المعنوية، مما أدى إلى توقفالاجتماعات الدورية للعديد من اللجان الإدارية للوحدات الصحية. الحصيلة: تبين الدراسة ازدياد الانتفاع بجميع الخدمات عما في ذلك الخدمات التي كانت وما تزال تُقدم مجاناً. وقد يؤدي فقدان المرافق الصحية لبعض الستقلالية إلى آثار سلبية على الأمد البعيد.

الهدف: تقييم آثار إنهاء العمل بنظام المشاركة في تكاليف الخدمات الصحية المقدمة للمرضى الخارجيين، وأعضاء اللحان الإدارية للوحدات الصحية حول الوضع الجديد.

الطريقة: تم انتقاء ٧٨ مرفقاً صحياً من عشر مناطق صحية في أوغندا، وأجري حصر لعدد المترددين على هذه المرافق قبل ٨ أشهر من إنحاء نظام المشاركة في التكاليف وبعد ١٢ شهراً من إنحاء هذا النظام. وقد بلغ عدد زيارات المرضى الخارجيين ٢٢٥ ٩٦٦ ١ زيارة، وتم تقصي آراء العاملين الصحيين البالغ عددهم ٧٣، وآراء ٧٨ عضواً في اللجان الإدارية للوحدات الصحية حول آثار إنحاء العمل بنظام المشاركة في التكاليف.

الموجودات: أدى إلهاء العمل بنظام المشاركة في التكاليف إلى زيادة العدد المتوسط للزيارات الشهرية الجديدة للمرافق الصحية بنحو ١٧ ٩٢٨ زيارة

References

- 1. World Bank. Financing health services in developing countries. An agenda for reform. Washington: World Bank; 1987.
- Korte R, Richter H, Merkle F, Gorgen H. Financing health services in sub-Saharan Africa: options for decision makers during adjustment. Social Science and Medicine 1992;34:1-9.
- United Nation's Children's Fund. The Bamako initiative. New York: UNICEF; 1988.
- Soucat A, Levy-Bruhl D, Gbedonou P, Drame K, Lamarque JP, Diallo S, et al. Local cost sharing in Bamako initiative systems in Benin and Guinea: assuring the financial viability of primary health care. *International Journal* of Health Planning and Management 1997;12:S109-35.
- 5. Gilson L. The lessons of user fee experience in Africa. *Health Policy and Planning* 1997:12:273-85.
- Collins D, Quick JD, Musau SN, Kraushaar, Hussein IM. The fall and rise of cost sharing in Kenya: the impact of phased implementation. *Health Policy* and Planning 1996;11:52-63.
- Willis CY, Leighton C. Protecting the poor under cost recovery: the role of means testing. Health Policy and Planning 1995;10:241-56.
- Blas E, Limbambala ME. User-payment, decentralization and health service utilization in Zambia. Health Policy and Planning 2001;16 Suppl 2:19-28.
- Biritwum RB. The cost of sustaining the Ghana's "cash and carry" system of health care financing at a rural health center. West African Journal of Medicine 1994;13:124-7.

- Wilkinson D, Gouws E, Sachs M, Karim SSA. Effect of removing user fees on attendance for curative and preventive primary health care services in rural South Africa. Bulletin of the World Health Organization 2001;79:655-71.
- Okello DO, Lubanga R, Guwatudde D, Sebina-Zziwa A. The challenge to restoring basic health care in Uganda. Social Science in Medicine 1998:46:13-21.
- World Health Organization and Uganda Ministry of Health. The effects of abolition of cost-sharing in Uganda. Kampala: World Health Organization and Uganda Ministry of Health; 2002.
- Kipp W, Kamugisha J, Jacobs P, Burnham G, Rubaale T. User fees, health staff incentives and service utilization in Kabarole district Uganda. *Bulletin* of the World Health Organization 2001;79:1032-7.
- Kipp W, Kamugisha J, Burnham G, Rubaale T. Cost-sharing in Kabarole district, western Uganda: communities' and health professionals' perceptions about health financing. *Journal of Health and Population in Developing Countries* 1999;2:30-8.
- Uganda Bureau of Statistics. Statistical abstract. Entebbe: Uganda Bureau of Statistics; 2001.