

# User Charges in Health Care: A Review of the Concept, Goals and Implications to National Health Systems

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## Abstract

User Charges as a financing option in health care provision has been introduced since 1980s by governments in many African countries with varied outcomes. The lessons learnt from this health care financing system have not been extensively described. In this article, we examined the concept, the strengths and weaknesses of the system among countries that have adopted it. We suggest that policy makers need to critically look at the health care financing option offer by the introduction of user charges as a means of sustaining health care services in their environment.

## INTRODUCTION

USER charge system is a method of cost recovery, which directly addresses the problem of underfunding of government health facilities<sup>1</sup>. The concept is not new in Africa. It is based on the proposition that it is better for the poor to pay user charges to obtain the care they need, including drugs, than go to private market where the costs are invariably higher and treatment may be inappropriate.

South Africa, Namibia and Ethiopia have historically applied user charges in both government and non-government facilities<sup>2</sup>. Since the 1980s, more African countries introduced some form of user fee system. User charge system has come to play a significant role as an important alternative to tax-based financing for government health services in Africa. Recent surveys show that 14 out of 15 African countries<sup>3</sup> and 28 out of

37 African countries<sup>4</sup> operate some form of fee system in government health facilities.

The main objectives of user charges are to mobilize revenues, promote efficiency, foster equity, increase decentralization, sustainability and consumer satisfaction as well as private sector development leading to an overall goal of improved health outcomes<sup>5</sup>.

In a World Bank policy study on Health financing,<sup>6</sup> it was found that:

- User charges could dissuade unnecessary use of services.
- Coordinating prices among different levels of facilities, fee systems could encourage appropriate use of first contact and referral facilities.
- Providers of services in a user charge facility will, out of concern for the new costs facing their patients, limit such practice as over prescription of drugs or unnecessary investigation.
- Prices were to serve in promoting higher quality care, leading to greater consumer satisfaction.

The study therefore, examines whether user charges could lead to greater efficiency in the health sector than when services were provided free.

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### **User Charges and Revenue Generation**

Governments are generally responsible for the overall policy making and strategic planning for their countries health care delivery systems. However, health care financing goes beyond government sources. According to World Bank data for the year 1995, private out of pocket expenditure represented about 43% of all expenditure on health in Africa, with government accounting for 37%, while 20% were from donors<sup>5</sup>. In Cote D'Ivoire, where per capita GNP was about \$900 in 1985, household expenditures averaged about \$19 per capita as against central government expenditure, which averaged about \$8.20 per capita. In Ghana, per capita GNP was \$240 in 1987-88. Its per capita household expenditures on health was \$7.30 in 1985 compared with central government expenditures of about \$4.20. In Nigeria, where per capita GNP was \$400 in 1985-86, the average per capita household expenditures were about \$15, whereas central government health expenditures were to lie between \$1 - \$2 per capita<sup>5</sup>. In a developed country like the U.S.A with a per capita income of \$18,000, expenditures by the various public agencies for health care, principally the States and the Federal government are close to 50% of the total health spending. In most other industrialized countries, the public share of the total health bill may even be greater<sup>7</sup>.

A recent World Bank Survey reports that of the 29 African countries operating some kind of national system of user charges, revenue mobilization is the primary objective of about one third including Ghana, Kenya, Lesotho, Malawi, Namibia, Zimbabwe and Zambia. For the other two thirds, emphasis on the improvements in primary health services, particularly drug availability is the primary objective. Most countries in the latter category implement the Bamako Initiative where some levels of fees are charged and the proceeds are used to improve primary health care services<sup>5</sup>.

Senegal adopted the Bamako Initiative in 1991. A representative national sample revealed that the contribution of user charges to public health facilities was 5-11% for hospitals, 8-23% for health centers, 14-35% for health posts and 87% health huts<sup>8</sup>. In Benin, user charges contribute between 42-46% of the overall operating costs of the 44 health centers participating in the Bamako Initiative. In Guinea, user charges contribute between 38-49% of operating costs in participating health centers while in Guinea-Bissau this represents 39% of the operating costs of health units or the equivalent of 87% of the

facilities drug costs<sup>9</sup>.

In the Central African Republic (CAR), a financial analysis of thirteen public health centers found that cost recovery rates ranged from between 110% and 138% of recurrent costs (excluding salaries) to 5 - 75%<sup>10</sup>. This major difference was accounted for by the variations in the way the clinics operate. Those with the highest cost recovery rates are autonomous, sell their own drugs and systematically charge for services. Their decision making power particularly with respect to drug acquisitions, effective rationalization of drug management contributed immensely to minimizing the enormous wastes evident in facilities with low cost-recovery rates. In contrast, the facilities with the lowest cost recovery rates provide a wider range of free services, charge only for medical certificates and have limited control over the sale of drugs.

User charges tend to make a significantly smaller contribution to operating costs of hospitals than they do at lower levels of health care. This is because hospital charges form a small proportion of the relatively expensive clinical services provided. Additionally, patients referred to hospitals tend to suffer from acute illnesses requiring expensive care for which they are less able to pay. Between 1991-1993, user charges represented only 4.5 to 5.3% of the operating costs at Queen Elizabeth II Hospital in Lesotho. In Ethiopia, this was 23% of operating costs in 10 rural public hospitals and 32% in 8 urban public hospitals. Maternity hospitals however, tend to recover a higher rate of operating costs. In Nigeria for example, 82% of operating costs in 9 public maternity centers were recovered in 1986<sup>11</sup>. Vogel in 1992<sup>12</sup> asserted that Ghana had been able to recoup an average of 15% of recurrent expenditure on health care by government in the form of user charges. Estimates for some other African countries show an average gross yield of 5% of operating costs.

The role of user charges as a potential source of revenue cannot be considered in isolation but within the context of:

- a. Quality of health care as perceived by consumers
- b. Purchasing power of the consumers
- c. Prices of other goods and services

### **User Charges and Equity**

Various studies have shown that the introduction or an increase in the levels of user charges would at least lead to an initial fall in the demand for and utilization of health services especially among the poor. Litvack and Bodart

in 1993<sup>13</sup> however showed in a study in Cameroon that an increase in user charges accompanied by improvement in quality of services resulted in increased demand for and utilization of services. It was also found that the increase in utilization was proportionately higher among the poor than any other socio-economic group. Availability of high quality drugs at local health centers, costs in time and travel to reach alternative sources of care were factors that encouraged more people particularly the poor, to seek care at those centers. The increase in charges was more than compensated by reduced costs in travel and time made possible by the improvements in the quality of locally available services.

This study suggests that certain conditions are associated with improving access for the poor through a policy of increased user charges at government health facilities. These include:

- a. *Revenue Retention*: Retention of revenue must be added to other economic resources of the health facility.
- b. *Managerial Capacity*: The managerial capacity must exist to convert the retained revenue into perceptible improvements in quality.
- c. *Cost of Services*: The net effect of user charge policy must be to lower the overall costs facing potential users in gaining access to effective care.

Lucy Gilson in 1997<sup>13</sup>, observed however, that fees do not appear to generate adequate revenue or to be associated with the resource re-allocations necessary to enable substantial and sustained improvements in health care for the poor. Furthermore, the implementation of both formal and informal exemptions or sliding scales, which could protect the poor from the full burden of fees, is usually ineffective. Rather than protect the poor, it tends to benefit more wealthy groups such as civil servants and members of the armed forces who are exempted from fee payment.

Investigations on household (particularly the poor households) ability to pay fees have been very limited. As observed by Shaw P. and Griffin CC in 1995<sup>15</sup>, willingness to pay has often been seen to be synonymous with ability to pay. Other analysts however, have emphasized the difference between the two variables and the need to investigate them separately<sup>16,17,18</sup>. In Zambia, available evidence from limited studies show that sizeable numbers of people, who require medical attention and have previously obtained it, are staying at home and in some cases, dying because they cannot afford to pay<sup>19</sup>.

### *User Charges and Efficiency*

User charges, through appropriate policy guidelines can make the referral system work better and help improve efficiency of health care delivery. Ideally, a user's first point of contact in the system will be a facility such as a health dispensary or health clinic, where cheaper services can be provided. Experience has shown that referral systems do not work well in many African countries. A World Bank survey of 38 African countries revealed that only a few Anglophone countries that operate cost recovery schemes have structured their fees to promote appropriate use of facilities<sup>2</sup>.

In Ghana, a referral system failed because of imposition of user charges at community-level health facilities without improving the quality of care. In 1991, 11 government hospitals in Ghana saw almost twice as many out-patients as the rest of the government health network combined, including 33 general health centers and posts, 5 clinics and 79 maternal and child health clinics. As observed by Smith and Creese<sup>20</sup>, there was little point in maintaining an infrastructure and human resource base at the sub-district level, if there was minimal utilization of these services. Moreover, using sophisticated medical specialists and technology as a first point of contact in the health system undermined cost-effectiveness and efficiency, which are the main objectives of a good referral system.

Zimbabwe seemed to have made some progress in promoting efficiency through appropriate user charge reforms<sup>21</sup>. In the late 1980s, basic outpatient charges for adults in Zimbabwe were Z\$1.50 in a district or first referral hospital, Z\$3 in a provincial general hospital and Z\$5 in a central hospital. Maternity ward fees were Z\$15, compared with Z\$20 to Z\$30 in a central hospital. Individuals are given incentives to enter the lowest level of health care appropriate for obtaining the required services for their medical conditions. The government of Zimbabwe priced its health care provided by the Ministries of Health in a manner that encouraged restraint in the use of scarce financial resources, while endeavoring not to exceed households' ability to pay. With the Zimbabwe experience, it is imperative that fee structures need to be reformed to make the referral system more efficient.

### *User Charges and Utilization of Health Facilities*

The effect or relationship between user charges and utilization of health facilities is a complex one. Studies have shown that user charges reduced the

demand and utilization of health services. This was found to affect the poorest more than others. High charges may lead to waste of health resources since staff may end up with little to occupy them. In a review of user charges for health care, available evidence suggests that while they can generate additional revenue, they also deter the patients at the greatest risk<sup>20</sup>.

A study in Zaire showed that a rapid relative increase in the price of health care (compared to charges of standard food items e.g. eggs) led to sharp falls in the demand for curative services. The overall utilization rate fell from 37% to 31% in a defined population, while the coverage rate for prenatal contacts fell from 95% to 84%<sup>22</sup>. Like other studies, the authors concluded that at low-income levels, the demand for good quality health care is more elastic with respect to price among the poor than in the higher income groups.

Studies<sup>23,24</sup> on the effect of fee increase on utilization levels before and after the major increase in 1985 in Ghana showed drops in use of all government health facilities. This trend was sustained over a two-year period. However, in an urban health center, utilization gradually rose back to their pre-1985 level over a two-year period but remained at their reduced levels in rural health units for three years<sup>23</sup>. In these studies, it was also observed that there was substantial diversion of rural health demand to unlicensed sellers of drugs. In a study in Swaziland, there was an abrupt and large-scale shift in utilization away from government sources of care, following an increase in charges by 300% - 400% in governmental health units<sup>24</sup>. The impact of user fees on attendance at a referral center for sexually transmitted diseases in Kenya was investigated<sup>25</sup>. It was observed during the user charge period that the seasonally adjusted total mean monthly attendance of men decreased significantly to 40% of that before fees were levied. For women, the adjusted total mean monthly attendance was reduced to 65% of the pre-user charge level. There was no evidence of an increase in attendance over the course of the user charge period among either men or women. The investigation concluded that the introduction of user fees probably increased the number of untreated sexually transmitted diseases in that population, with potentially serious long-term health implications. Authors of a study in the UK, Birch and Abelson, in 1989<sup>26</sup> quoted a Canadian experience as having shown that the introduction of consultation fees in one province led to a reduction in attendance by the poor. The authors concluded, "The findings imply that at least some

of the services utilization deterred by charges lead to adverse health outcomes".

The government of Kenya introduced user fees for in-patient and curative outpatient care at its hospitals and health centers in December 1989. In September 1990, outpatient registration fees were removed, while other fees were retained. A study on the impact of the fees on access to care by children and the poor showed that attendance at out-patient and in-patient care was lower during the period when full fees were charged. However, the attendance improved when outpatient registration fees were removed<sup>27</sup>. The pattern of utilization by young children, who were exempted from fees, mirrored that of the rest of the population, suggesting that they were not fully protected from the adverse effects of fees. The poorest households made much less use of the fee-charging government facilities than the better-off households.

An example from Nigeria illustrates well the effects of user fees on maternal mortality. In Nigeria, a survey suggests that introduction of user fees deterred at-risk women from seeking antenatal health care with the result that the number of emergencies being admitted without prior care increased. Many of the women are poor and already at risk; "poverty greatly amplifies every other risk factor for maternal mortality and maternal morbidity". The unbooked emergencies are high-risk patients and they make up 70% of all hospitals maternal deaths and a higher number of intra-uterine and prenatal deaths. The women arrive late, when their lives are already in danger due to difficult labour, complications and co-existing diseases. The late arrival increases operational risk and for those who survive, the recovery was slow, hospital stay prolonged and treatment costs, both for the provider and beneficiary were substantially increased<sup>28</sup>.

The consequence of reduced government spending has also had high social and humanitarian costs in Zimbabwe where maternal mortality increased from 101 in 1989 to 265 per 100,000 1992<sup>27</sup>. In 1991 Zimbabwe introduced rigorous fee collection at public health services in order to reduce the fiscal deficit. The cost-recovery programme had a clear negative impact on the health of the many poor people who were no longer able to afford the costs. Visits to health centers particularly antenatal clinics decreased. As in the case of Nigeria, the number of births in the Harare Central Hospital to mothers with no antenatal care increased substantially, from 1.6% to 8.8%. The prenatal mortality rate for these women is five times as high as for those who

attend antenatal care. In view of the adverse effect of user fees on poor people, Zimbabwe withdrew the cost-recovery programme from rural clinics in 1995.

Quite different patterns emerge between the Anglophone and the Francophone countries<sup>29</sup>. For example in the Cameroon, locally organized user fee systems appear to have had a large positive effect on both quality and levels of utilization, whereas in Kenya the highly centralized system first implemented in 1989 had a very negative effect upon utilization. Many of the Francophone countries had been successful in raising the key indicator of drug availability. Drugs seem to be very critical in people's perception of quality of care and this probably explains much of the observed increase in utilization.

A study on the effects of user charges on the dispensing of prescription medicines was carried out in the Wellington region of New Zealand<sup>30</sup>. The effect of social class, customer type and number of items on the incidence of payment problems was examined. Pharmacists from 26 randomly selected pharmacy shops completed questionnaires on each occasion. The result showed an incidence of 1.5% of payment problems. User charges resulted in medicine dispensing failure on 56% of the problem occasions. Customers incurred debt or were funded by a social agency on the remaining 44% of problem occasions. Fifty three percent of dispensing failure resulted in non-collection of items at the end of the study period. The study concluded that user charges may provide a greater barrier to children and people living in areas of high social needs.

### Conclusion

Despite the little contribution to national health budgets, user fee is an important source of revenue at the level of individual facilities<sup>18, 31, 32</sup>. In countries where government allocations pay largely for personnel, lack of other inputs such as drugs, spare parts and other forms of maintenance, put severe limitations on the quality and availability of services. The use of revenue retained from fees to provide these inputs therefore can lead to more regular and sustainable services, which in turn can create a major impact on the health status of those being served. On the other hand, user fees may dissuade some people from seeking care or lead to harmful delays in treatment. Studies in Zimbabwe suggest that an intensified enforcement of user charges in 1991 may have had some negative effects on health

status. The use of maternal health services decreased by 30% compared with the previous year. Similarly, the number of babies born before their mothers reached the hospital – Born Before Arrival (BBA) increased by 4%<sup>33</sup>. This situation reflected delays in presenting for care at health facilities, probably to minimize per diem hospital charges. Therefore policy makers need to critically look at the health care financing option offer by the introduction of user charges as a means of sustaining health services in their environment before embarking on policy reforms that have long term implication on health status of their population. Critical review of literatures, situation analysis and studies to evaluate the efficiency of current services are needed to improve the quality of health care.

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