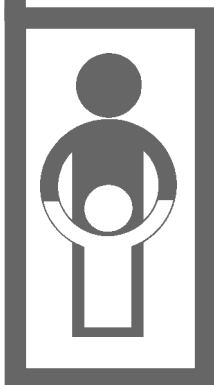


Practice and policies on user fees for immunization in developing countries

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**DEPARTMENT OF VACCINES
AND BIOLOGICALS**



*World Health Organization
Geneva
2001*

**The Department of Vaccines and Biologicals
thanks the donors whose unspecified financial support
has made the production of this document possible.**

The GAVI Financing Task Force, as represented by its core members, considers that the arguments and evidence presented are sound and balanced, and is in general agreement with the content and conclusions contained within the paper.

This document was produced by the
Access to Technologies Team
of the Department of Vaccines and Biologicals

Ordering code: WHO/V&B/01.07
Printed: March 2001

This document is available on the Internet at:
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Preface

This is a background paper on formal user fees for essential immunization services. User fees are taken to mean any fee charged to the consumer in return for immunization services. Informal payments¹ are not the main focus here, as this paper is meant to inform decision-makers who are determining national policy on user fees. The paper consists of a review of international organization policy on user fees for immunization, a short annotated bibliography of relevant literature, and a compilation of examples of the implementation of user fees for immunization.

This paper was prepared for the Financing Task Force of the Global Alliance for Vaccines and Immunization (GAVI). The purpose of this document is to provide the background for a fact sheet on user fees for immunization for use by GAVI member agencies and others in advising governments on immunization finance. As such, the paper takes the form of a review of relevant and available materials and is not intended to be a thesis promoting a particular viewpoint. Conclusions are based on the results of that review.

¹ Informal payments may include in kind contributions of medical supplies like alcohol, syringes and other supplies, “under the table” or “envelope” payments to health workers, and so on. More study is needed on these informal payments.

Summary of findings

Findings:

- User fees discourage people from seeking vaccination.
- Public funding is the most equitable way to finance essential immunization.
- Essential immunization services should be free of charge.

Essential immunization services

Essential immunization services can be defined as the safe and timely delivery of effective vaccines of public health importance to those who need them. Essential vaccines have been defined by the World Health Organization, but vary depending on disease burden in different regions and countries. While national governments determine the list of vaccines deemed essential for their immunization programmes, WHO provides a model list of essential drugs as a guideline for policy-makers at the national level. This list is based on disease prevalence, product efficacy, product safety and availability. The WHO *Model list of essential drugs*, 11th edition (November, 1999) lists the following vaccines for universal immunization:

BCG, diphtheria, hepatitis B, measles, pertussis, oral poliomyelitis, and tetanus.

For specific groups of individuals, such as inhabitants of areas with high disease burden, the following additional vaccines are deemed essential on the model list:²

- Influenza, meningitis, poliomyelitis injection, rabies, rubella, typhoid and yellow fever.³
- *Haemophilus influenzae* type B (although it is not yet on the model list, WHO encourages the introduction of this vaccine; i.e. it can be considered essential).⁴

² For information on which vaccines WHO recommends as essential for a specific country, please contact the Department of Vaccines and Biologicals at WHO, Geneva.

³ Countries which should incorporate vaccination against yellow fever into the national immunization programme are identified in the WHO publication WHO/EPI/GEN/98.11, Vainio & Cutts (*1*), distributed by the Department of Vaccines and Biologicals. 34 African countries are at high risk and should consider yellow fever vaccine as essential. Medium risk countries may also consider the vaccine essential.

⁴ See the WHO position paper on *Haemophilus influenzae* type B (Hib) conjugate vaccines (*2*).

Policy review of user fees

In general, there is international consensus on ensuring universal access to primary health care, of which essential immunization services are an integral component. Basic health services, including essential immunization, is a human right^{5,6}. The positive externalities of immunization justify public expenditure to promote widespread protection against disease and to stop disease transmission. In support of this, the Copenhagen Declaration and Programme of Action of the World Summit for Social Development, 1995, made a commitment to “achieving universal and equitable access to quality education, the highest attainable standard of physical and mental health, and universal access to primary health care”. While many countries have recognized the right to health in their constitutions, some countries have gone a step further by enacting legislation that ensures effective access to immunization through its provision free of charge to the target population.⁷

⁵ Convention on the Rights of the Child, *Article 24*:

1. States Parties recognize the right of the child to the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health. States Parties shall strive to ensure that no child is deprived of his or her right of access to such health care services.
2. States Parties shall pursue full implementation of this right and, in particular, shall take appropriate measures:
 - (a) To diminish infant and child mortality;
 - (b) To ensure the provision of necessary medical assistance and health care to all children with emphasis on the development of primary health care;
 - (c) To develop preventive health care, guidance for parents and family planning education and services.

⁶ United Nations Universal Declaration of Human Rights, *Article 25*:

1. Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.
2. Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same social protection.

⁷ Ecuador's immunization law was published on 1 September 1997. Venezuela's immunization law was published on 8 March 1996.

The Addis Ababa consensus on principles of cost sharing in education and health (3) resulted from a forum convened under the auspices of the United Nations Economic Commission for Africa (ECA), in collaboration with UNICEF and the World Bank in Addis Ababa in June 1997. The forum addressed cost-sharing in the social sectors of sub-Saharan Africa. The forum was sponsored by the Governments of the Netherlands, Sweden, the United Kingdom and the United States of America and included senior government representatives from 17 sub-Saharan African countries, as well as nongovernmental organizations (NGOs), bilateral and multilateral agencies. The consensus itself is based on the notion that sustainable and equitable development builds on health and education for all, and is expressed in the form of 15 principles (see text box below).

In particular, the Addis Ababa consensus states that “cost sharing in health should exempt preventive care, in which benefits extend beyond users (e.g. immunization) as well as selected primary health services”. This is in agreement with the Convention on the Rights of the Child which specifies that “States Parties recognize the right of the child to the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health. States Parties shall strive to ensure that no child is deprived of his or her right of access to such health care services” (Article 24).⁸

⁸ The Convention of the Rights of the Child was adopted unanimously by the General Assembly of the United Nations on 20 November 1989.

The Addis Ababa June 1997 consensus on principles of cost sharing in education and health: 15 principles

1. Cost sharing in the form of user charges should be considered only after a thorough examination of other options for financing social services. Other options include tax reform, budget restructuring and expenditure targeting within government budgets and aid flows. General taxation and other forms of government revenue are more effective, efficient and equitable methods of raising revenue for financing social services than are cost-sharing mechanisms.
2. Even though general taxation is a major cost-effective way to raise revenue, cost-sharing meets two specific objectives: (i) to limit the financial burden that stems from a rapid increase in demand for non-basic services, which the State cannot meet on its own without diversification of providers; and (ii) to overcome practical and managerial obstacles that may prevent an adequate level of resources from reaching basic education and health services.
Efforts to contain costs in the delivery of social services and to increase efficiency in resource allocations to the primary level must be considered prior to the introduction of cost sharing.
3. Basic social services should be either provided free of charge or be substantially subsidised. Basic education should be free, and other out-of-pocket costs to parents, such as school uniforms and school supplies, should be minimized. Cost sharing in health should exempt preventive care, in which benefits extend beyond users (e.g. immunization), as well as selected primary services. Cost sharing should be a stepping stone towards other financing options for health care.
4. When cost sharing is being considered, it should be as part of a comprehensive sector strategy for both health and education, formulated by government with all stakeholders. The sector strategy should specify clear, measurable and verifiable objectives, the resources required to meet those objectives and the ways of mobilizing and allocating the resources among competing priorities.
5. Resources generated through cost sharing should be additional and should not be a substitute for existing resource allocations to the education and health sectors.
6. To be successful and sustainable, cost sharing must lead to immediate and measurable improvements in the access to and quality of services. In this regard, revenue generated through cost sharing must be retained, along with spending authority, at the local level. Disadvantaged regions and communities may need extra financial support to ensure that cost sharing does not lead to a widening of regional, socio-economic and gender disparities.
7. Cost sharing must be accompanied by special measures that effectively protect the poor. Experience shows that the poor have not been effectively protected against the negative impact of cost sharing on their access to basic education and health. While cost sharing may be necessary because of severe constraints on financial resources and/or institutional capacities, caution must be exercised wherever there is doubt about the ability to protect the poor. No one should be deprived of his or her right of access to basic education and basic health.
8. Non-discretionary exemption schemes are preferred, from the point of view of efficiency. Discretionary exemption schemes have not succeeded in identifying and protecting the poor. Although more benefits may leak to the non-poor, non-discretionary exemption criteria, such as age, gender, region and type of service, are less likely to affect the access of the poor to services. Moreover, discretionary criteria, such as income and physical assets, can be difficult and costly to administer.

15 principles (continued)

9. Involvement of beneficiaries is critical to the success and sustainability of cost sharing. Community participation and control of resources must be fundamental in the process of designing appropriate cost-sharing mechanisms and in their management. The roles, rights and responsibilities of local communities vis-à-vis government and service providers must be discussed and clarified prior to the implementation of cost sharing.
10. Community participation in the financing and management of the social sectors must not be considered a substitute for government responsibility, but should be seen as an essential element in improving service delivery.
11. Communities should be made fully aware of the principles and implementation mechanisms of cost sharing. Training and capacity-building of community management committees and service providers are essential to successful cost sharing.
12. Community management committees should be locally elected and fully accountable to the community and should ensure the adequate representation of all stakeholders, including balanced gender presence.
13. Cost-sharing mechanisms should be carefully tested through phasing and/or piloting before they are applied on a large scale. Testing is meant to assess their impact on effectiveness, efficiency and equity at the local level. The administrative cost sharing must be kept to a minimum.
14. Cost sharing mechanisms must be regularly monitored and evaluated, with a view to ensuring quick feedback on their consequences, particularly regarding their impact on the poor, on women and on children.

Source: UNICEF, New York, 1998.

The UNICEF-WHO Bamako Initiative endorses the cross-subsidization of immunization services, which are free for card-holders, through other user fees in the health sector including drug charges. This cross-subsidization does not pay for the vaccines themselves, but contributes to the cost of running the immunization services. The Bamako Initiative aims to improve service quality through user fees for curative, but not for preventive health services.

The Pan American Health Organization (PAHO) has issued a statement on the general implementation of user fees in the Caribbean as follows:

A PAHO/UNDP/Caricom project policy document noted the following:

“[In Caribbean countries, user fees] have not generated any discernible increase in revenue, and in fact have increased the administrative burdens on the public health system.... An effective collection system has not been implemented in most countries...Second, user fees have become an additional barrier to access to health by the poor and hence have proven to be regressive. Third, there is no systematic formula for granting exemptions on the basis of inability to pay for services. Fourth, the implementation of user fees has necessitated the reallocation of personnel from provision of health care to the administrative tasks of fee collection and assessment for exemptions...”
(4) Therefore the PAHO/Caricom/UNDP project policy round table (May 1999) concluded that “user fees have no potential to make a positive contribution as part of a health care financing strategy.”
[bold added]

The World Bank’s Health, Nutrition and Population toolkit, prepared for the poverty reduction strategy papers, states the following:

“Price influences utilization behaviour. A higher money price of HNP [health, nutrition and population] services tends to reduce utilization levels, especially amongst the poor, unless accompanied by improvements in service quality. By the same token, insurance tends to raise the usage of HNP services. User charges can, in principle, be accompanied by fee waiver programs, but the evidence on the effectiveness of these programs at reducing the price of services at the point of use for the poor is somewhat mixed. It is important to note that it is not just fees that deter the prospective patients – it is also the uncertainty surrounding payments in environments where informal payments are rife.”⁹

The World Bank sector strategy further emphasizes the importance of government intervention in the financing of essential health activities:

“Securing Adequate Levels of Financing. Strong, direct government intervention is needed in most countries to finance public health activities and essential health, nutrition, and reproductive services, as well as to provide protection against the impoverishing effects of catastrophic illness.”⁽⁵⁾

⁹ Toolkit produced by the World Bank for preparing the HNP section of a Poverty Reduction Strategy Paper. Current as of 1 March 2000. Washington DC, World Bank, 2000:32.

The consensus on user fees for vaccination that was reached at the Children's Vaccine Initiative Meeting on Sustainable Financing and Vaccination at UNICEF, New York, in February 1999, is reported below:

“Although there are serious concerns about the use of charges for immunization, it is preferable not to limit the options available to countries.

Since the tax-base is not well developed, poor countries face restraints on their public budgets which inevitably raise the issue of co-payments. If these are to impact immunization, it may be preferable to charge per visit basis or to cross-subsidize, allowing charges in other areas to finance immunization.

User fees are not going to contribute much to global efforts to favour immunization. Certainly they will not significantly enhance programme funding. But governments working at different levels may find benefits in user fees in specific situations.

In many cases, charges for immunization already exist on an unofficial basis and we need to know more about the effects of this on immunization activities.”¹⁰

¹⁰ From the discussion following the presentation by Alfred Da Silva on cost recovery in Côte d'Ivoire, at the Meeting on sustainable financing for vaccination programmes. See CVI (6).

Examples of user fees for immunization

The Bamako Initiative: Through the Bamako initiative, fees charged for drugs cross-subsidize the cost of immunization services (not vaccines), which are provided free to card-holders. Usually users must pay a nominal charge for the immunization card. (7) Problems include lack of sustainability due to inadequate administration or very low levels of revenue in the face of high levels of need.

However, there is some evidence that cross-subsidies of this type can work. (8) The examples of Guinea and Benin show that local financing raised through user fees can cover recurrent local costs, excluding salaries and vaccines, in most health centres. These funds, governed by a local health community, can provide continuity in the context of irregular delivery of funds from district or central levels, and they can empower communities to take responsibility for their health services. As a result of the implementation of the Bamako Initiative and community financing in Benin and Guinea, curative and preventive care utilization increased significantly. (9)

Systematic insurance in China: The systematic insurance system for preventive care, which combines aspects of user fees and risk pooling, is described in a 1996 WHO technical paper:

“The systematic health insurance system is an annual prepayment for a package of mandatory services including immunization for children, family planning and post-natal care. In some provinces, the parents pay an amount for each child, which covers a full course of immunization, and reimbursement of treatment costs for any of the target diseases, up to the age of seven years.” (10)

According to one co-author of this study¹¹ the systematic insurance system has resulted in serious gaps in population coverage as a result of unwillingness or inability to pay, despite the fact that it is theoretically mandatory.

¹¹ Guy Carrin, WHO, personal communication, 9 November 1999.

Hepatitis B user fees in China: According to a report from the responsible WHO officer in China in September 1999, user fees are charged for hepatitis B vaccine:

“The fees [for hepatitis B vaccination in China] range from about 20 to 40 Chinese Yuan RMB for 3 doses depending on the area and income levels. Where economic levels are high, the coverage is high. Where people are poor (such as remote rural areas), coverage is low or even zero. Other EPI [Expanded Programme on Immunization] vaccines (DTP [diphtheria-tetanus-pertussis], OPV [oral polio vaccine], measles and BCG [bacille Calmette-Guèrin]) are given free of charge, with only a small administration fee to be paid by parents. A World Bank project in 10 provinces is looking at different ways to subsidize the cost of hepatitis B vaccine for the poorest people, and we expect to get some useful information out of the project. It is still too early to have data on the experiences in the project provinces.

It is clear that where coverage is high, as in Beijing, Shanghai and parts of Hunan province, hepatitis B carrier rates in young children have declined dramatically. Results in other areas with lower coverage are not so clear. The decline in carrier rates in the areas achieving high coverage are certainly success stories. [WHO has] been pushing MOH to include hepatitis B as a full EPI vaccine to be provided free of charge, but this has not been possible so far.

There are many reasons for this, mainly linked to funding of health services. However, the question of whether new vaccines added to EPI will receive different treatment in funding is an important one for China and, I expect, also for other developing countries as well. At present the new vaccines hepatitis B, Hib [*Haemophilus influenzae* type B], MMR [mumps, measles, rubella] are given only to those who can afford it. We are arguing that the consideration of who receives vaccines should be based on public health disease prevention considerations as well as commercial aspects.”¹²

Other user fees in China:¹³ While regular Expanded Programme on Immunization (EPI) vaccines may be provided free, the syringes are often not. In some richer Chinese provinces, disposable syringes are being used instead of sterilizable glass syringes for immunization. However, these disposable syringes have to be bought by the parents for a child’s immunization. The wholesale cost of the syringe is considerably marked up by the “retailer”, the health worker. This constitutes a *de facto* user fee. Since there is an administration fee, often paid for through systematic insurance, only the vaccine is being paid for by the government. In the case of hepatitis B, discussed above, even the cost of the vaccine is not covered by government. Although overall coverage for hepatitis B is about 50% for the country as a whole, the range in provincial coverage varies from close to 100% in the richest areas to 0% in the poorest. The poorest people in the three poorest provinces in the west of China may be provided exemptions from these charges, but in practice the onus is on the patient to prove eligibility for exemptions.

¹² Alan Schnur, WHO, personal communication, 6 Sep. 1999.

¹³ Discussion at Technet Meeting, Harare, 6 Dec. 1999 and Alan Schnur, WHO, personal communication.

Côte d'Ivoire: A case study on vaccination user fees in Côte d'Ivoire was presented by Da Silva at the Children's Vaccine Initiative Meeting on Sustainable Financing and Vaccination at the United Nations Children's Fund (UNICEF), New York, in February 1999. A summary of the presentation from the meeting report is reproduced here:

“In Côte d'Ivoire an immunization campaign against yellow fever and meningococcal meningitis was implemented with user charges in two high risk northern provinces. It should be noted that a lack of resources at the central level left little alternative to the mobilization of private financing. In addition, the Bamako Initiative with its emphasis on community participation and its use of fees had already been implemented at the district level.

The Ministry of Health decided to conduct mass immunization campaigns in five northern districts starting with two, Bondoukou and Bouna. These were carried out through a formal partnership with the National Institute of Public Hygiene (INHP), the Red Cross of Côte d'Ivoire (CRCI), Association pour l'aide a la Medecine Preventive (AMP), district level health workers, and contributions-in-kind by Pasteur Mérieux Connaught (200 000 doses each of yellow fever and meningococcal vaccines). Overall, 245 103 people in these two districts were immunized. Fees (500 FCFA = US\$ 0.85) for the two vaccines were charged on a per person basis with the objective of contributing to the purchase of vaccines for other similar campaigns.

A financial and cost accounting system for the campaigns was established to provide the partners with transparency in the use of resources and to make assessments of the costs and revenues of the campaigns.

All partners contributed to the implementation of the campaign. INHP provided coordination and management, a link with the Ministry of Health, and resource mobilization. CRCI contributed to logistics, personnel and transport, and social mobilization. AMP provided technical support, monitoring and operational research.

The campaign resulted in coverage rates of 55% in Bondoukou and 36% in Bouna. Urban coverage was higher than rural coverage (72.3% to 43.4%). Together, the campaigns in the two districts yielded a credit balance of US\$ 6670. In terms of costs, the cold chain and social mobilization expenses accounted for less than 2% of the total, with the majority used for vaccines, solvents and injection equipment.

The yellow fever coverage subsequent to these campaigns compares favourably with the EPI coverage (vaccines provided free of charge). In the Bondoukou region, the campaign resulted in 62.3% coverage, while EPI yielded coverage rates of 37.4% among children between the ages of 2 and 4. The difference was even greater in the Bouna district.

Campaigns such as these demonstrate a willingness to pay for certain immunization services (linked to disease awareness and quality of delivery) among the population but they require both transparent partnerships and strong management.

Some questions remain. The impact on equity is not entirely clear, and these mechanisms are not yet optimal in terms of desirability. It is possible that certain variations, such as pre-payment, may be preferable.”¹⁴

¹⁴ From the presentation by Da Silva on cost recovery in Côte d’Ivoire, at the Meeting on sustainable financing for vaccination programmes. See CVI (6).

Conclusions

Ensuring access to essential immunization services is the responsibility of the government. Basic health services, including immunization, are a human right. Essential immunization services should be provided free of charge to the consumer, as is made explicit in the Addis Ababa Consensus document (see text box above). Essential immunization services should be provided at no charge in order to maintain equitable distribution of these essential services, to combat poverty and to meet public health goals that capture the positive externalities of immunization (herd effect). Public financing of essential immunization services should cover the full costs so that informal user fees or in-kind charges can be eliminated. Essential vaccines have been defined by WHO in its *Model List of Essential Drugs*, 11th edition (November, 1999).¹⁵ This list is updated regularly.

Charges for non-essential vaccines may be justified where there would otherwise be no immunization with these vaccines, where disease awareness is high, and where quality of care is good. In other words, if people are highly motivated to pay for the vaccine for their own personal benefit, and if they have the means to pay for it, then enough people may buy the vaccine for themselves and transmission may be stopped. This is unlikely to be the case for any vaccine or other preventive health measure, and other mechanisms for providing non-essential immunization services should be investigated before deciding to implement user fees. If and when user fees are implemented for non-essential immunization, the following ingredients are critical:

- There must be a target group that is willing to pay for non-essential immunization services that would not otherwise be offered.
- There must be a transparent and efficient means of identifying those who should and should not be charged user fees, a means of subsidizing the costs of those who cannot pay for essential services, and dissemination of this information to potential users.
- Fees charged must be revised periodically and fee-setting options reviewed, including cross-subsidies for immunization.
- There must be local capacity to implement and manage the fees, to ensure accountability, and to make sure fee collection achieves its purpose: to expand access to quality care.
- Effects of the user fees should be monitored.
- Some or all of the fees collected must be used within that health facility.

¹⁵ Essential vaccines, sera and immunoglobulins as determined by WHO are listed on pages 1 and 2 of that paper.

User fees have been found to decrease utilization of health services in most cases. Furthermore, the poor are the ones most discouraged from health service use by fees. User fees seem to be most successful when they are:

1. charged for drugs,
2. retained by the provider – and the provider is compensated for services to those unable to pay,
3. linked with improvement in health service quality, and
4. combined with cost containment.

In some cases, user fees for drugs may be used to cross-subsidize essential immunization services, but this is potentially both regressive and inequitable. The following table summarizes the extent to which user fees contribute to vaccine finance goals.

User fees for essential immunization services and vaccine finance goals¹⁶

Goal	Option: user fees
Equity	Poorer people are more likely to go without essential immunization services if there is a user fee.
Cost-effectiveness	Expensive to administer and most often do not cover the full cost.
Coverage	Coverage is negatively impacted by user fees.
Speed	Timely access will not be provided to all.
Feasibility	Cultures with high social solidarity or very low income may resist user fees.
Transparency	Fee collection and management requires a high level of accountability, which is often difficult to implement and monitor.
Simplicity	User fees are difficult to administer.
Sustainability	Experience shows that user fees adequate to ensure sustainability are not consistent with universal coverage goals.
Independence (self-sufficiency)	User fees for other health services used to cross-subsidize vaccination, if retained at local level, may allow greater local control over health services, but essential preventive services should be free.

¹⁶ For definitions and explanations of these goals, see WHO (11).

In summary, user fees should not be used for essential immunization services for the following reasons:

- User fees impose a financial barrier to immunization for the poor and discourage parents from seeking immunization for their children.
- User fees have proven to be an inefficient and ineffective way to recover costs.
- The discouraging effect of user fees is higher among the lowest income groups.
- User fees work against efforts to expand immunization coverage.
- Immunization has positive externalities that increase significantly over a certain coverage threshold (herd effect), and so it is economically justifiable to finance immunization with public funds.
- Immunization against diseases of public health importance is highly cost-effective and should have a high priority in allocations of public resources.

Public financing of essential immunization services, accompanied by sound management, is the most equitable funding mechanism.

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Annotated bibliography

No documents were found that focused specifically on user fees for immunization of children. However, there is a considerable body of literature on user fees in health care in general. A selection of that body of work was reviewed and relevant findings are summarized here in alphabetical order by author.

Barlow R & Diop F. Increasing the utilization of cost-effective health services through changes in demand. *Health Policy and Planning*, 1995, 10(3):284–295. Oxford University Press.

The authors investigated the effect of price, income and taste on utilization of prenatal care and childhood immunization against tuberculosis in Burkina Faso and Niger. They found that utilization was most sensitive to distance to be walked to a health facility.

Bloor K, Maynard A & Piercy J. *Flagship Module 7, provider payment mechanisms*. The Flagship Course on Health Sector Reform and Sustainable Financing. Washington DC, World Bank, Economic Development Institute, 1997.

Chapter 5 of this training module examines methods of payment to service providers and includes a comprehensive analysis of user charges in both the developed and developing world. Their review indicates that in developed countries the implementation of prescription charges decreased the use of essential drugs such as diabetic agents and anti-hypertensives, as well as increasing the utilization of mental health services among low-income patients. Use of cancer diagnostic services also decreased when user fees were implemented. Studies of user fees in developing countries that indicate low-price elasticity only examined the impact of very low user fees. In addition, even where poor households are willing to pay, they may do so only through becoming indebted or through sales of assets. Exemptions may be a solution, but are notoriously difficult to implement. The authors also indicate that fees should be subsidized for public health programmes with significant externalities, such as immunization.

Carrin G, Perrot J & Sergent F. The influence of financial participation by the population on the demand for health care: An analytical tool for countries in greatest need. *Macroeconomics, Health and Development series, No. 6*. Geneva, World Health Organization, 1994 (WHO/ICO/MESD.6).

This comprehensive paper provides an introduction to the basic principles concerning demand, factors influencing demand for health services, case studies and the relationship between demand for health services and public health objectives. The specific impact of fees applied at the point of demand is discussed as are methods of fee setting. Risk sharing is also discussed. Empirical findings are reviewed on the impact of financial participation on demand for health services, as well as on the impact of other variables such as quality of services, distance, waiting time, and so on. Health care demand and equity are also examined in the context of user fees and financial participation in general. A summary of the empirical evidence of the impact of financial participation on demand for health services is as follows (p. 87):

- “Most of the studies confirm the existence of price elasticity of demand for health care ranging from very low values to values that show a certain sensitivity. Nevertheless, most of the studies report elasticities of less than 1 (in absolute value), thereby implying that increased fees always result in an increase in overall revenue, all else being equal.
- All the studies show that improvement in the quality of care, measured by the characteristics of the health personnel and the availability of drugs at affordable prices, has a positive influence on demand.
- Most of the studies reveal the influence of distance and time on demand for care, but that it may once again be offset by improvements in quality. It would also seem clear that distance is a factor that determines the choice between health structures.
- On the whole, the studies confirm that the poor are more sensitive to variations in fees than the other social groups. More especially, children under 5 and elderly people are mentioned as being among the most vulnerable groups. One study found, however, that improved quality can be of greater benefit to the poor than to the more affluent groups.
- Finally, some of the studies show how difficult it is to establish differential fees based on criteria of equity.”

Ching P. User fees, demand for children’s health care and access across income groups: the Philippine case. *Social Science and Medicine*, 1995, 41(1):37–46.

This paper examines the potential effects of user fees on the demand for child health care across income groups. A model of provider choice was estimated using national data from the Philippines. The model explicitly allows for price elasticity to be dependent on income. The results indicate that price plays a significant role in the demand for child health care and that medical care demand for poorer children is substantially more price sensitive than it is for richer children. The notion that user fees are regressive is therefore supported.

(Source of this review: H.J. Choi and assistant)

Creese A. User Fees, They don't reduce costs, and they increase inequity. *British Medical Journal*, 26 July 1997, 315:202–203.

This commentary briefly outlines the limitations of user fees and their profound impact on access. The conclusion is as follows: “As an instrument of health policy, user fees have proved to be blunt and of limited success and to have potentially serious side effects in terms of equity. They should be prescribed only after alternative interventions have been considered.”

Criel B, de Vos P, Van Lerbergh W & Van der Stuyft P. Editorial: Community financing or cost recovery: Empowerment or social dumping? *Tropical Medicine and International Health*, June 1996, 1(3):281–282.

The authors distinguish between community financing, which should make “people responsible for more rational health care utilization and involve the population in the management of their health services”, and cost recovery, which shifts responsibility for health from the State to the individual. “Health is here viewed as a private responsibility and health care as a commodity that has to be purchased...” The case is made that cost recovery is a dangerous way to seem to offer services to the poor “within a dismantled public sector”.

De Roeck D & Levin A. *Review of financing of immunization programs in developing and transitional countries*. Bethesda, MD, Abt Associates Inc., 1998 (Special Initiatives Report No. 12. Partnerships for Health Reform Project).

As part of a comprehensive review of immunization financing, the authors provide seven pages of analysis of cost recovery in immunization, including user fees. Although they found that a few countries charge a fee per shot or a fee per immunization card, only 18% of countries surveyed charge for immunization. Those charging were mainly from sub-Saharan Africa, and it could be that the charges cited are partly cross-subsidies from drug charges through the Bamako initiative. Where there are direct charges, they cover less than 5% of total costs of immunization. Several data gaps on cost recovery in immunization were identified.

Diop F, Yazbeck A & Bitran R. The impact of alternative cost recovery schemes on access and equity in Niger. *Health Policy and Planning*, 1995, 10(3):223–240. Oxford University Press.

The authors compared primary health care in three rural districts of Niger. One district retained the status quo free health service. [Note that I discovered in another paper on the same study that all preventive services remained free of charge.] The second and third implemented improvements in management and quality of care, including improved drug availability, diagnostic training, and cost containment. In the second district, a fee for service was instituted. In the third district, a local annual tax combined with a very low user fee was instituted. There were certain exemptions made for classes of people. Findings were dramatic in that the combined risk pooling/fees system generated twice as much income as user fees alone, and utilization increased. Significantly, people were willing to travel farther to the health

facility after the quality improved, despite the new charges. This suggests that health service access in Niger is more sensitive to travel time than to financial issues related to cost recovery.

Gilson L. The lessons of user fee experience in Africa. Review Paper. *Health Policy and Planning*, 1997, 12(4):273–285. Oxford, Oxford University Press.

Gilson's conclusion eloquently summarizes her findings: "The available evidence suggests that, if introduced by themselves, fees are unlikely to achieve equity, efficiency or sustainability objectives. Fees should, therefore, be seen as only one element in a broader health care financing package that should, in particular, include some form of risk-sharing. Although fees may be a critical step allowing the development of other financing mechanisms (e.g. high hospital fees promote insurance coverage), their implementation must be tied to this broader package in order to limit the potential equity dangers clearly associated with them. Within this package fees have a greater potential role within hospitals, rather than the primary care level."

Godin C. Cameroon and Chad: cost recovery. *Annals of Tropical Medicine & Parasitology*, 1998, 92 (Supplement No. 1):S163–S164. Liverpool School of Tropical Medicine.

The author described user charges for ivermectin in Chad and Cameroon. Since the drug was provided free of charge by Merck, the user charges were about US\$ 0.20 to cover delivery costs. The author reports that studies in Cameroon and Chad have shown that the user fees have had no significant effect on coverage and that those charged felt that the treatment must be worthwhile if they have to pay for it. Those too poor to pay contributed bags of millet or were treated free of charge. In some villages, only adults came forward for treatment, so children were treated free of charge. The funds were dedicated to improvement of the primary health care system.

Griffin C. *User charges for health care in principle and practice*. Washington DC , Economic Development Institute of the World Bank, World Bank, 1988. 80 pp.

This paper makes the case for user fees in health services on the grounds of increased efficiency and equity, and better financial and managerial performance. The analysis focuses on cost recovery for curative care in hospitals. There is no specific discussion of user fees for preventive care.

Jarrett SW & Qi, XQ. Financing of child immunisation services in China. *Asia-Pacific Journal of Public Health*, 1998, 2(1).

Keywords: EPI sustainability, Financing, Pre-payment, Country Experience

China is accelerating its Expanded Programme on Immunization (EPI) to reach 85% of children under one year of age in each county by 1990, thereby protecting them against six preventable childhood diseases. With around 20 million births a year, this is a daunting task. This review looks at the financing of child immunization services in China, not in its

totality but focusing on the primary care level. In most parts of China village doctors are responsible for carrying out immunization services in rural areas, where 80% of the population live. Different ways have been tried to pay village doctors for their work, with considerable variations at the local level. Two methods are beginning to create the conditions for long-term sustainability of services: 1) in poorer areas, county subsidies from the regular county health budget provide a regular monthly income for the village doctor; 2) in more economically-advanced areas, a pre-payment plan called the EPI contract, is enjoying considerable initial success in generating parental interest in child immunization and funds for paying village doctors as well as contributing towards the maintenance of EPI operations.

(Source of this review: PHR annotated bibliography)

Knippenberg R et al. Sustainability of primary health care including Expanded Program of Immunizations in Bamako Initiative Programs in West Africa: an assessment of 5 years' field experience in Benin and Guinea. *International Journal of Health Planning and Management*, 1997, 12 (Supp.1):S9-S28.

Keywords: Management, Sustainability

Since 1986 Benin and Guinea have taken on the task of reorganizing their peripheral health systems. Their objective was to improve health systems performance despite their former decline due to inefficient management and economic crisis. This paper is an explanation of how, in these two countries, national programmes revitalized the existing health centre network in order to improve the effectiveness and efficiency of health services, while ensuring sustainability and establishing equity mechanisms. Cost recovery mechanisms and results are considered and analysed.

(Source of this review: PHR annotated bibliography)

Note: although this article examines the impact on community financing generated through user fees on the provision of minimum care packages, it is not clear whether there were user fees for immunization in Benin and Guinea under this system.

Litvack JI & Bodart C. User fees plus quality equals improved access to health care: results of a field experiment in Cameroon. *Social Science and Medicine*, August 1993, 37(3):369-83.

This paper reviews a controlled experiment in five public health facilities in the Adamaoua province of Cameroon in which the impact of user fees and quality improvements on health facility utilization were monitored. It was found that utilization rates went up, especially among the poorest quintile, probably due to improved drug availability in the health facilities.

Madrid Y, Velazquez G & Fefer E. *Pharmaceuticals and Health Sector Reform in the Americas: An Economic Perspective*. Action Programme on Essential Drugs, World Health Organization, and Regional Program on Essential Drugs and Technology, Division of Health Systems and Services Development, Pan American Health Organization, Washington DC, World Health Organization. January 1998. 93pp.

This book has a chapter on user fees that provides a general review of their implementation and impact on equity and access to pharmaceuticals. It does not provide a specific discussion of user fees for immunization or vaccines.

McPake B. User charges for health services in developing countries: a review of the economic literature. *Social Science and Medicine*, June 1993, 36(11):1397–405.

Literature suggests that in theory, the efficiency of user charges for health services is related to the level of externality, the price elasticity of demand, the proportion of total costs which are private access costs, and the level of the government budget constraint. Theoretical models predict that price elasticity of demand for health services is likely to be higher for lower income groups and that user charges are therefore unlikely to promote equity or reduce the discrepancies between the utilization rates of the rich and poor, all other factors being the same. Empirical evidence tends to confirm the latter prediction but to suggest that user charges in many countries provide the scope for welfare gains for the majority. Unfortunately, this scope is seldom exploited in practice. It is argued that many countries have little choice but to try to exploit the potential for majority gains, but that more emphasis should be placed on ensuring quality improvements than on superficial financial measures of success.

(Source of this review: H.J. Choi and assistant)

Musgrove P. *Public spending on health care: how are different criteria related?* Washington, DC, The World Bank Institute, The World Bank, 1998. Forthcoming in *Health Policy*.

This paper maps out a decision tree for public spending. This decision tree justifies the allocation of public resources to interventions like cost-effective immunization against diseases of public health importance, especially where such immunization will confer significant positive externalities and where private demand is inadequate. The paper argues that if the positive externalities could be captured through private purchase, then public spending is not justified. In other words, if people will pay for immunization in order to get a personal benefit for themselves, and if this demand is high enough to produce the wider public health benefits of widespread immunization, then there is no justification for public spending. If poverty, failure to appreciate the benefits, or other issues cause demand for cost-effective immunization to be too low with respect to public health goals, then there should be public spending to increase demand. In the summary, the following statement is made:

“Public funds should finance public and semi-public goods that are cost-effective and for which demand is inadequate; cost-effective interventions that preferentially benefit the poor; and catastrophically costly care, when contributory insurance will not work, or there are good reasons to finance insurance publicly.”

Nexoe J, Kragstrup J & Ronne T. The impact of postal invitations and user fee on influenza vaccination among the elderly. A randomized controlled trial in general practice. *Ugeskrift for laeger* (Denmark), 1997, 159(27):4270–3.

Influenza epidemics [in Denmark] are accompanied by considerable excess morbidity and mortality, especially among the elderly and the chronically ill. In the influenza season of 1995, a controlled, randomized trial was carried out to examine the impact of postal invitations and user fees on influenza vaccination rates: 585 patients aged 65 years or older participated. They were all recognized by their general practitioner to be in the risk group for which influenza vaccination is recommended. One third were invited for free influenza vaccination. Another third received postal invitations for influenza vaccination for which they were to be charged the regular fee (US\$ 40–60). The last third served as a control group, having access to vaccination at their request subject to the regular fee. In the control group, 25% (19–31% in 95% confidence interval) of the patients were vaccinated, compared with 49% (42–56% in 95% confidence interval) in the group which received a postal invitation and were charged the regular fee, and 72% (65–78% in 95% confidence interval) in the group invited to be vaccinated free of charge.

(Source of this review: H.J. Choi and assistant)

Percy A., Brenzel L, & Waty M. *Cost recovery for immunization: a worldwide survey of experience*. Arlington, VA: John Snow, Inc. and REACH Project, April 1991.

Keywords: Financing, Cost Recovery, Country Experiences

This document presents the results of a comprehensive survey of cost-recovery mechanisms for EPI which are currently in place or which have been attempted recently in 103 countries. The survey includes 42 countries in Africa, 37 countries in Asia/Near East, and 24 countries in the Latin America/Caribbean region. Results of this survey show that a wide variety of cost recovery or alternative financing mechanisms have been tried in many developing countries to raise additional resources for the EPI or PHC. Initiatives in both the public and private sectors are described. The authors recommend that detailed assessments of the most promising mechanisms be undertaken so that these experiences can be shared with other developing countries facing difficulties in financing immunization programmes.

(Source of this review: PHR annotated bibliography)

Reddy S & Vandemoortele J. *User financing of basic social services, a review of theoretical arguments and empirical evidence*. New York, Office of Evaluation, Policy and Planning, UNICEF, 1996. 103 pp.

This review covers a decade of experimentation with user fees for basic social services. It makes the following conclusions (p.1):

“(i) the special features of basic social services associated with positive externalities, public and merit goods, principal-agent interactions and asymmetrical information imply that price signals will not guarantee greater efficiency and effectiveness; (ii) the potential of user financing for resource mobilization should not be exaggerated; (iii) although user financing can promote greater accountability on the part of service providers and more responsibility on the part of users, there is no guarantee that this will be the case; (iv) user financing can result in a sharp reduction in the utilization of services, particularly among the poor; (v) protecting the poor through price discrimination has proved extremely difficult in practice, and exemption schemes can be costly to administer; (vi) gender biases, seasonal variations and regional economic disparities can aggravate the effects of user financing on equity; (vii) user financing requires adequate capacities, effective decentralization and continued government support; (viii) user financing can undermine political support for the goal of universal coverage of basic social services; and finally, (ix) user financing does not empower beneficiaries in the way the recognition of basic social rights does. There are powerful economic and moral grounds on which to avoid user financing for almost all basic social services. Although universal access to free basic social services is the ultimate goal, severe resource constraints may force policy-makers to consider user financing as a temporary and pragmatic measure to narrow the gap between supply and demand, especially if budget restructuring and cross-subsidization in favour of basic social services will not be immediately feasible.”

The review goes on to describe principles of best practice, which are broadly similar to the Addis Ababa Consensus Principles (see text box above).

The report provides an extensive review and discussion of the complex issues concerning user fees, and the empirical evidence that has been gathered on implementation of such fees. It includes specific reference to health issues, including immunization. In the Appendices to the report, a list of questions to be considered before implementing user fees is provided. These questions address the issues of efficiency, effectiveness and equity.

Sauerborn R, Bodart C, & Essomba RO. Recovery of recurrent health service costs through provincial health funds in Cameroon. *Social Science and Medicine*, 1995, 40(12):1731–39. Elsevier Science Ltd.

The authors describe Provincial Health Funds in two provinces in Cameroon. Through charges for drugs and through user fees for certain hospital-based health services, these funds aimed to cover all non-salary recurrent costs of the health centres. By year three of operation, the fund covered 62% of these costs and was projected to cover 100% by year four as the fund expanded. Salaries, which constitute 85% of recurrent costs, were not covered. From the budget data, it did not seem as though vaccine costs were covered, although they might have been included under “drugs”. If so, it was not stated whether vaccines were provided free of charge. However, outreach costs, depreciation and maintenance of vehicles, and cold chain were clearly included as recurrent costs to be covered by the fund.

Schwartz JB & Loevinsohn B. Financing immunization, sustaining effective social programs in Cambodia, Lao PDR and Viet Nam. Manila, Asian Development Bank, 1999.

The authors explored options for financing immunization in Viet Nam, Lao PDR and Cambodia. The following comments were made on the implementation of user fees for immunization:

“User fees for immunization are self-defeating if poor households without the ability to pay decide not to immunize their children. This could lead to decreased coverage among a particularly vulnerable group. While user fees for immunization are not sensible in most settings, they may be of some value if they are used in remote rural areas to cover transportation costs and per diems that encourage health workers to conduct more outreach.”

Thomas S, Killingsworth J, & Acharya S. User fees, self-selection and the poor in Bangladesh. *Health Policy and Planning*, 1998, 13(1):50–58. Oxford University Press.

This paper makes the case that self-selection rather than targeting can be used to allocate health resources to subsidize services for the poor. The case most analogous to immunization is condom distribution. Condoms had been distributed free of charge, and the government valued the family planning benefits of condoms more highly than the cost of the condoms. However, due to resource scarcity, some form of cost recovery was sought. The answer was to have different grades of condom, all basically the same product. The “premium” brand was overpriced with the profits going to subsidize the basic brand. The basic brand was “almost free”. It is critical that the “almost free” condoms are affordable to the poor, as there are reports of field workers going into debt to pay for condoms. This mechanism only works if people have a high awareness of family planning methods. (In the context of immunization, self selection could conceivably be made in the packaging or presentation of immunization services.) The paper sets out criteria for self selection as follows (p.56):

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1. “The patient or consumer’s decision is restricted to non-health matters.
 2. The patient or consumer’s decision involves little or no external medical impact on others.
 3. The patient or consumer should have sufficient information about the market options or choices available.
 4. The benefits and costs of the patient’s decision should be relatively unambiguous.
 5. Self-selection is used to cross-subsidize health care for poorer patients while also raising revenue. (At the very least, the inequality reinforced by the use of self-selection is acceptable given the benefits of revenue generation.)
 6. Ideally, market segmentation should be complete for self-selection and there should be no possibility of retrade.
 7. The patient is not in need of emergency treatment.
 8. There is always a market alternative for the poor which is compatible with their ability to pay.”

Thomason J, Mulou N & Bass C. User charges for rural health services in Papua New Guinea. *Social Science and Medicine*, 1994, 39(8): 1105–15. Elsevier Science Ltd.

The authors reviewed the implementation of user charges in 32 health facilities in Papua New Guinea. In 4 of the 32, there was a user charge for the well baby clinic, and in 13 of the 32 there was a charge for the Child Health Book. Immunization *per se* was not disaggregated. The authors do not recommend the continuation of user fees and offer the following findings:

“The fees are creating a barrier both for entry and continuation in the health system; accountability is poor, and issues of cross subsidization are not addressed; fee revenues from rural health services are small and primarily of local significance, and are not being used to improve quality of health services. Cost recovery schemes in rural areas have the potential to provide a valuable contributory source of income to operate and improve health services. In practice, few are achieving this. It is concluded that health sector financing focus could be more fruitfully directed to financing mechanisms with greater potential to improve and expand health services.”

Shaw RP & Griffin C. Financing health care in Sub-Saharan Africa through user fees and insurance. Washington, DC, The World Bank, 1995. 99pp.

Strong arguments for user fees are made, coupled with recommendations to use the fees as the basis for self-financing health insurance. The rationale is that 40% of total health expenditure in Africa is already private out-of-pocket expense. Specifically, the recommendations seem to indicate that charging fees for curative services while increasing the quality of care may increase access to acceptable standards of care for most, and free up government funds to finance preventive public health interventions such as immunization. However, immunization services were not explicitly exempted

from user fee charges in this document, and it was suggested that a tightly focused strategy might only exempt low income groups from paying for a package of essential health services (p.51). The authors do state that in order to be effective, users must be able to “see the value” of the service they are purchasing (p. 24) which poses an obvious problem for immunization, where a mother may see nothing or only a mildly negative consequence for her baby in the short run. Furthermore, the authors indicate that the provision of free services forms a barrier to private participation in the market (p. 28). This barrier may actually be an advantage for immunization control and monitoring. The authors also cite a 1993 study by Forsberg that indicates 10–30% of households in Africa have trouble paying even minor fees (p. 31) and they go on to cite other examples of sharp drops in utilization where user fees have been implemented. All in all, this paper does not provide any substantive arguments for user fees for immunization.

Willis C & Leighton C. Protecting the poor under cost recovery: the role of means testing. *Health Policy and Planning*, 1995, 10(3):241–56. Oxford University Press.

The authors examined the informal means testing processes in Niger. Interesting findings included the high percentage of patients paying unofficial fees for officially free government health services. In the Say district of Niger, 39% of patients were paying these unofficial fees. After imposition of official fees, 77% of the patients in Say paid fees. The percentage of the poor who received waivers of official fees decreased markedly when these fees were established, whereas about 90 to 100% of the poor received waivers of the unofficial fees. In contrast, a rather high percentage (22–25%) of the non-poor were also exempted from official fees. Also, it was found that only a negligible number of the poor could find fees through family or community relationships. These findings suggest that means testing is inadequate in protecting the poor and assuring access to health services.

Yazbeck A & Leighton C. Research Note: Does cost recovery for curative care affect preventive care utilization? *Health Policy and Planning*, 1995, 10(3): 296–300. Oxford University Press.

This study examined the effect of user fees for curative care on the utilization of one free-of-charge service: prenatal care. The study was carried out in Niger. They did not find any negative impact of cost-recovery for preventive services in the districts that implemented cost-recovery for curative care and quality improvements, in fact, an increased utilization rate was observed.