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CHILD SURVIVAL, COST-RECOVERY,
AND ESSENTIAL DRUGS:
EXPERIENCE AND ISSUES

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CHILD SURVIVAL, COST-RECOVERY, AND ESSENTIAL DRUGS: EXPERIENCES AND ISSUES

1. Introduction

Substantial donor and country efforts in recent years have been focused on the development and implementation of child survival activities, specifically expansion of immunization coverage and ORT use. The movement has now progressed to consider how best to ensure the sustainability of those efforts. One proposal has been made -- the Bamako Initiative -- to focus first on financial sustainability through the establishment and support of community financing efforts. While human resource development and institution building are also critical to developing long-run sustainability of child survival activities, ensuring adequate financing is one important element.

Efforts to address the financing of child survival activities in the context of overall PHC have often focused first on the financing of pharmaceuticals. This is true for a number of reasons. Drug expenditures frequently constitute the most sizeable component of public health expenditures; hence, allocating these resources in line with priority health goals and managing them with an eye toward overall cost containment can maximize their impact. When revenue generation schemes are considered, drug sales programs are often the most acceptable as the point of entry; populations are known to be willing to pay for drugs for curative care, and often do so in the private sector when they are not available through government health facilities.

Important experience has been gained in recent years as countries have implemented cost-recovery schemes and other mechanisms to finance pharmaceutical needs in selected areas. This experience has offered a number of lessons and raised important issues that will need further exploration in the years ahead.

2. Country Experiences

2.1. Cost-Recovery and Essential Drugs

Revolving drug funds have been one of the most commonly attempted mechanisms of cost-recovery. They are attractive because they are theoretically self-financing after a one-time capital investment by the community, the government, or an outside donor. The supply of drugs can be continued indefinitely without further government budget allocations, as long as the receipts from sales (or from local health budgets) are sufficient to cover replacement costs. In comparison to public free-drug programs revolving drug funds make use of an untapped financial resource -- patients' payment for drugs.

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The revolving drug funds that have been tried have been at the local, district, regional, and national levels in countries around the world. Some examples which have met with varying degrees of success are:

- in Africa -- in Benin, Cameroon, Central African Republic, Chad, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, Sudan, Tanzania, and Zaire;
- in Asia -- in Afghanistan, Bangladesh, China, India, Indonesia, Nepal, Philippines, and Thailand; and
- in Latin America -- in Bolivia, Dominican Republic, Guatemala, Haiti, Mexico, and Peru.

Most efforts at cost-recovery of essential drugs have been limited to charging for drugs used in curative care, and have not involved fees for immunizations. The two exceptions we are aware of were in projects in Cameroon and Senegal; in the latter case, villagers seemed willing to pay for measles vaccination but not for the entire immunization series, leading to depletion of resources in the revolving fund.

In practice, establishment of revolving drug funds has been fraught with difficulties. When drug supplies are depleted and insufficient revenues are available for the purchase of replacement stocks, the drug sales program comes to a standstill. Some of the most commonly cited problems include the following:

- rapid program expansion for which additional capital funds are not available;
- under-estimation of the capitalization costs of the supply system;
- unanticipated losses of drugs through theft or deterioration;
- prices set too low for intended level of cost recovery;
- failure to collect payment for drugs with no subsidy system;
- unanticipated price increases from inflation or changes in parity rates;
- foreign exchange limitations which restrict foreign purchases.

Many of these problems are avoidable, or their impact can be minimized, through careful financial planning and sound financial management. Trained staff and management infrastructure in place have been found to be critical elements of a revolving drug fund which is self-sustaining.

Some of the best-known examples are described below:

Zaire. Government health services were decentralized in Zaire in 1982, and led to the creation of 306 health zones which were to be largely

self-financed. A variety of payment schemes are being used in the zones, but the most common appears to be charging one fee per visit, to cover both consultation and drugs received, as well as a 10-15% markup for inflation. In approximately 15-20% of the zones, a health management committee has been established, with responsibility for financial management of the revolving fund. The percentage of costs recovered varies significantly among zones, but in some areas sufficient margins have been recovered to contribute to the costs of zonal supervision and mobile teams.

Liberia. Cost-recovery for health services began in 1975, but by 1983 drug and medical supply systems began to fail, leading to severe shortages in 1984. Contributing factors included low fees, multiple exemptions, widespread failure to collect, and return of collected funds to the central treasury.

In 1984 the establishment of a National Drug Service (NDS) was recommended following a special study of the drug supply situation. With A.I.D. assistance the service was established in 1985. In 1986, under the same project, a revolving drug fund was started which involved hospitals in two counties (districts) and in late 1987 the revolving drug fund was extended to community health workers in these two counties.

Drug fees of \$0.25 to \$1.00 per item are meant to cover drug re-supply costs, while visit fees of \$0.10 to \$0.50 are intended to help support local operating costs, including salaries, transport, facility improvement, and incentives for staff. Immunizations are free and fees for drugs and services are less expensive for under-fives. Complete, but simply organized cash, drug, and patient service accounting systems have been developed and taught to health care providers. Community committees are expected to play an important role in supervising local health staff and assuring accountability. To generate community involvement and support establishment of funds in new areas, the communities are being required to raise 50 to 100 % of the required seed stock.

Locally-established revolving drug funds or other forms of cost-recovery are now operating in 10 of the country's 13 counties. These programs have developed with support from a variety of donors and have benefitted from cross-fertilization. Although only two of these counties currently participate in the NDS-supported revolving drug fund and it is too early to determine the impact of the scheme on health services in these two counties, there is considerable interest in expanding the NDS system to support revolving funds in all 13 counties.

Benin. The sale of essential drugs is the basis for a cost recovery scheme implemented in one region of Benin, with a population of 12,000. Generic drugs are bought through international organizations such as UNICEF and IMPAS and are then sold to patients at the health centers. Prices are set per treatment episode, varying according to treatment, with patients paying for the entire treatment at their first visit. All preventive care is free, and provision has been made to provide curative care free of charge to school children and indigents.

Since this is a community managed system, the community not only pays for curative care but also, through its representatives, is involved in the setting of prices, in the management of income, and in the remuneration of village health workers.

Prices set at 3 times the actual costs of drugs, significantly less than prices charged on the open market, have been acceptable to the population. After 3 years of operation, this system permitted the recovery of up to 85% of local operating costs -- including the essential drugs, village health worker salaries, health complex maintenance, local transport, cold chain, and small office supply. Charging for treatments was not found to decrease use of health services; on the contrary, it permitted a significant increase in the coverage of the target population with the most essential PHC services. This approach is now effectively being extended to other regions of the country.

Senegal. Community financing has been instituted through a number of different projects in Senegal. The best documented is the Sine Saloum Rural Health Project, where financing mechanisms have included fees for service, direct payment for drugs, cash or in-kind contributions for health hut construction or payment of village health workers, and local taxes which have been used in part toward support of health services.

One problem identified early in the Project was competition between the health huts where charges had been instituted and other facilities at higher levels of the health system that were continuing to provide services and drugs free; this created an disincentive for villagers to seek care at the health posts, and was corrected by the Ministry instituting user fees at all levels. Financial viability has also been a problem, particularly early on when village health workers were collecting charges; since then, village health committees have taken on the responsibility of collecting and managing funds, and the national government has agreed that all revenue will stay at the village level. Community participation in and management of PHC services has become one of the most successful features of this project.

Chad. Even with substantial donor contributions, the Ministry of Public Health of Chad is unable to meet the country's estimated pharmaceutical requirements. In response to this problem, a pilot drug sales project was initiated in one region with the full support of the Minister of Public Health and local authorities. Drugs procured from non-profit suppliers in Europe were sold to outpatients at prices which included the drug cost plus freight, plus recurrent costs such as stationery, transportation within Chad, and the salary of the project administrator. Each patient had to have a prescription with the authorized rubber stamp of the prescriber; incoming cash was deposited in a special bank account controlled by a specially-appointed Supervisory Committee. The average charge paid for a prescription was US\$0.73, or 3.04% of average per capita income in this region. After 3 months, less than 1% of prescriptions were not filled. Organizers of the pilot project felt that the initial experience indicated that even low income patients were willing and able to contribute to the financing of PHC through the revolving drug fund.

Haiti. An analysis of recurrent government health expenditures in the late 1970's led the Government of Haiti to create by presidential decree a semi-autonomous pharmaceutical supply agency ("AGAPCO") for the establishment and supply of a network of community pharmacies. AGAPCO was to supply 66 essential drugs in patient-ready course-of-therapy packages through a network of four regional stores to pharmacies established within government health centers or independently in the community. Drug fees varied according to the value of the drug and were intended to cover drug replacement and operating costs. In September, 1982 the first 23 community pharmacies were operational.

By late 1985 nearly 200 pharmacies had been opened, with pharmacies in each of the four regions. Despite -- or perhaps because of -- the rapid increase in AGAPCO outlets, sales had reached a plateau, major stock losses had been incurred because sales were less than projections, and operating costs were greater than the cost of drugs distributed. Systematic analysis of the situation identified several operational and organizational factors which contributed to the slower than expected growth. A resuscitation plan was developed which focused on internal management improvements (retraining of community pharmacy staff, MIS, procurement, management continuity), marketing activities (expanded drug list, selected promotional activities, careful review of pricing decisions) and donor dynamics (establishment of a "consultative council" and regular reporting of self-sufficiency indicators to donors). At the close of fiscal year 1986, sales were up 40 %, operating cost increases were less than 1 %, and revenues were nearly covering drug replacement costs.

2.2. Pharmaceuticals for Child Survival

Pharmaceuticals -- vaccines, ORS, selected antibiotics, maternal vitamin and mineral supplements, family planning commodities, and related essential drugs -- represent the therapeutic core of child survival. Yet, little attention has been directed to the relationship between expenditures on pharmaceuticals for child survival and total government pharmaceutical expenditures. Recently A.I.D. commissioned country studies in Egypt, Nepal, and Indonesia to consider this issue (13), (14).

Nepal. Total public and voluntary sector pharmaceutical expenditures for 1986 were found to be US \$ 3.7 million -- barely \$ 0.22 per person for provision of essential drugs (\$0.12 per person), family planning commodities (\$0.07 per person), and vaccines and expendable immunization supplies (\$0.02 per person). Thus, vaccines and expendable immunization supplies represented only 8 percent of total pharmaceutical expenditures.

Overall health post utilization rates in Nepal appeared to be generally low, averaging an estimated 0.1 to 0.5 visits per person per year. Compared to the burden of illness in the community, under-fives appear particularly under-represented at health posts. Furthermore, potentially fatal conditions such as diarrheal disease and ARI appeared under-represented compared to irritating but generally non-fatal conditions such as skin disease and intestinal worms. A community survey in one district

and anecdotal information from many other districts indicated that lack of essential drugs was a major contributor to under-utilization of health services.

The existence of detailed prescription records in one district allowed analysis of treatment patterns for a random sample of over 12,000 patient contacts. Despite higher illness and mortality rates among the under-five population, they represented only 15 percent of patient contacts (under-fives also are roughly 15 percent of the population) and accounted for only 11 percent of pharmaceutical expenditures. When ORS was first introduced, over one-half was consumed by the under-fives but by 1986, five years later, the under-fives were consuming only about one-third of the ORS which was distributed. Over a 5 year period ORS use increased, but as an addition to antibacterials and not a replacement for antibacterial use.

The data suggested overuse of antibacterials in the treatment of diarrheal disease, acute respiratory conditions, and common skin conditions. The most used drug -- both in terms of quantities consumed and expenditures -- was procaine penicillin. But scabies, cuts, lacerations, and wounds were its most common uses. Relatively little was used for life-threatening conditions or conditions generally requiring an injectable antibiotic.

In summary, the Nepal data suggest that, despite a high burden of morbidity and mortality among the under-five population, expenditures for child survival pharmaceuticals represent a small portion of total expenditures. Furthermore, despite severe limitations on pharmaceutical resources, available resources are not used for maximum therapeutic efficiency.

Egypt. Analysis of pharmaceutical expenditure trends and prescription patterns in Egypt demonstrated a strong reliance on the private sector for child survival pharmaceuticals as well as for pharmaceuticals overall. The public sector was found to consume only 12% of the national requirements for all pharmaceuticals in 1985-86, and even less -- only 10% -- for child survival pharmaceuticals. Further, private consumption has been increasing more than government consumption in the last 5 years. No differences were found, however, in the prescribing behaviors of public and private institutions.

There is no recognition of child survival pharmaceuticals as such in health programs and no standard therapy lists are available. Yet, this study identified 245 items as most commonly prescribed for the target age group, and found that the needs for these items (in both public and private sectors) were estimated at 15.8% of total pharmaceutical needs. Since the target age group (0-6 years) is 19.2% of the total population, it is somewhat under-represented in pharmaceutical expenditures.

Analysis of prescribing patterns suggested over-prescribing of antibiotic preparations for diarrheal disease and acute respiratory infections (constituting 23% of the total market for child survival pharmaceuticals in volume terms). Consumption of antidiarrheal drugs was also high and increasing, while ORS consumption was found to have decreased slightly in the previous year. Where ORS was used, it was found to be in addition to rather than as a replacement for other antidiarrheal medications.

Consumption of vaccines was found to have increased dramatically, to 20% of the child survival market. When compared with population-estimated requirements, however, this indicated apparent over-consumption, suggesting possible savings through reduction of waste or unscheduled "booster doses" of popular vaccines.

Indonesia. An analysis of data gathered for 7 provinces whose population collectively represented 50 % of the total Indonesian population was used to compare pharmaceutical expenditures with need. Total pharmaceutical expenditures, not including family planning commodities, were US \$ 77 million in 1986-1987 or \$0.46 per capita. Vaccines represented an average of 5 percent of total drug expenditures, ranging from 1.8 % to 9.2 % among the provinces. Expenditures on a single oral antibiotic capsule commonly used for a variety of adult illnesses were greater than expenditures for all vaccines combined. Compared to estimated needs, most antibiotics appear to have been over-ordered; two of the top five drugs purchased in 1984-1985 were antibiotics which did not appear once on nationally developed treatment standards. Although supply and estimated need were similar for some vaccines, the overall vaccine supply was one-half the need estimated from patient attendances (Figure 1).

The study also calculated standard treatment costs and compared total patient contacts with pharmaceutical need based on reported morbidity patterns and standard treatments. The average cost of pharmaceuticals for child survival conditions is less than that for adult illness visits. As a result, all immunization visits, under-five illness visits, prenatal visits, and postnatal visits -- which account for 60 % of all contacts (Figure 2) -- could be fully supplied for only 38 % of the drug budget (Figure 3). Vaccine and ORS requirements would require roughly 25 % of the current pharmaceutical expenditures.

The relatively high proportion of patient visits accounted for by immunization contacts, under-five illness visits and antenatal care is also reflected in data available from one state in Nigeria (Figure 4).

In summary, despite nearly adequate total pharmaceutical allocations, child survival pharmaceuticals were under-funded in comparison to pharmaceuticals used primarily for adult illnesses. The data suggest that requirements for child-survival pharmaceuticals could be fully funded through more therapeutically and economically efficient allocation of available pharmaceutical resources.

2.3. Alternative Financing Mechanisms

There are generally three approaches to increasing the financing available for child survival: 1) improved resource allocation, that is, allocating the resources that are available for pharmaceutical procurement toward those items which are most cost-effective, in order to expand the supply of vaccines, ORS, antibiotics for ARI, and other essential drugs; 2) cost containment in drug supply systems through careful selection, wise procurement, efficient distribution, improved cold chain management, and promotion of appropriate drug use; and 3) revenue generation, through which additional resources are sought to supplement the funds available in

the public sector. It is this third approach which is currently the focus of substantial interest.

Revenue generation can occur at any level of the health system, from the national level to the community level. The drug sales programs described are one mechanism, but by no means the only mechanism, for revenue generation. They are often thought to be a useful point of entry for building interest in alternative financing, and particularly in community financing, which may lead to later exploration of other more comprehensive financing schemes with the potential for covering the full range of health services.

Other mechanisms which are commonly considered for generating revenue to support health services are described below (2), (20).

Increasing Government Budget Allocations through Taxation

Increasing governmental resources through new or increased taxes is, at first glance, an appealing mechanism for mobilizing additional funds for the health sector. Both income taxes and indirect taxes on consumption and trade have been suggested, but are not always feasible given a country's stage of development. An income taxation system requires relatively sophisticated infrastructures for administration. Consumption taxes also require a minimum bureaucratic capacity, but have been applied successfully to generate revenue for health in two regions of Senegal. Taxes on trade items are dependable only if foreign trade is an important part of the economy; when feasible, taxes on luxury items can be appealing from an equity point of view. One of the drawbacks to taxation is that it is very difficult to ensure that the additional resources will be channeled to health.

Lotteries have sometimes been organized by governments to raise funds for health purposes. They are most appropriate for one-time investment programs. They have been criticized as regressive, however, in view of the frequently large participation of low-income groups.

Foreign Aid

Another way to enhance resources for health is by soliciting funds or donations of equipment or commodities from abroad. These can make important contributions to health services. Foreign aid is frequently used to develop the health infrastructure, through construction of facilities, training, and continuing education of health personnel, but often assumes that recurring costs are the responsibility of the government. When funds or commodities are supplied, as contributions to the operating budget, there is no guarantee that they will be continued; a government relying on such donations puts itself at risk. With that perspective, foreign aid is probably most appropriate when viewed as a short-term intervention or as a mechanism that is complementary to domestic financing efforts.

Fees for Service

Fee for service schemes refer to the institution of charges for visits to health facilities (also called consultation fees) or for the use of laboratory services. While different from direct payments for drugs, fees for service often include provision of drugs. Fee for service schemes have been used widely, both formally in national efforts and informally through numerous local initiatives around the world. The setting of fees varies tremendously. Fees are usually seen as a contribution toward the recurrent costs of health services, often covering village health worker salaries and local administrative and transport costs. Collection of fees also varies, depending in large part upon the incentives that are provided by the structure of the fee for service scheme. Experience suggests that when the revenues collected are made available to cover expenses at the level at which the revenues were generated, they are collected much more vigorously. On the contrary, when they are to be simply submitted to the next higher level of the system, or to be contributed to "government revenues," with no benefit felt at the service delivery level, there is little incentive for fees to be collected conscientiously.

Health Insurance/Prepaid Health Schemes

Governmental health insurance programs do exist in some countries of sub-Saharan Africa, but coverage is limited to those employed in the modern sector. This excludes virtually all of the rural population. Before more universal programs are likely to be developed, the organizational problems of setting up a low-cost and efficient administration, assessing the capacity of households to pay, and determining affordable premia and how to collect them must be resolved. Prepayment or insurance schemes at the community level are still met with some resistance. This seems to be due to a combination of factors -- fear that the promised services will not be delivered, inadequate resources to make the prepayment required, and family solidarity as a substitute method for coping with the health risks of individual family members. Nonetheless, prepaid schemes have been instituted in a few areas. In most of the cases where they have been tried, over-consumption of health services by members was felt to be a problem and coinsurance and/or deductible mechanisms have been introduced. When prepayment schemes are not compulsory, they may fall into the trap of adverse selection, then becoming too costly to be workable.

Cooperatives and Other Forms of Community Financing

There are numerous other mechanisms for financing health services at the community level, some more formalized and some ad hoc. Cooperatives are a more formalized structure, serving populations from a few hundred people to all of China. Most often organized around agricultural production, they are formed as mutual aid societies, often contracting with physicians or even with the Ministry of Health in some cases to receive health services on an ongoing basis. The financing mechanism is usually prepayment by coop members, but for a milk cooperative in India it is based on levies charged for each litre of milk sold.

Many communities generate resources through special fund raising and personal donations. Community assessments have been reported in a few areas, but are not common. Festivals, raffles, and other community events have been used to raise cash for specific health projects. In-kind contributions are common for payment of traditional practitioners, less common for payment of community health workers.

2.4. Private Sector Participation

With the exception of geographically or economically isolated countries such as Papua New Guinea and some centrally planned economies, most developing countries have an active private pharmaceutical sector. Generally 50 to 90 percent of pharmaceutical expenditures are made through the private sector. Options with respect to private sector participation in child survival include social marketing, educational programs, involvement in supply management, and regulation. However, efforts to date have focused primarily on social marketing of ORT and ORS. There have been fewer and/or less well-documented efforts in other areas.

Social marketing. Social marketing techniques have been applied to public, joint, and private family planning programs for many years. More recently, techniques of social marketing have been applied to promote ORT and ORS. Interest in social marketing of other essential drugs appears much more limited.

Promotion of generic drugs in the U.S. is perhaps the most successful effort to market essential drugs. Data from 1985 showed the U.S. to have the highest rate of generic drug use among 7 developed countries and by 1987 36 % of all prescriptions were filled by generic name.

Efforts to stimulate purchase and appropriate use of essential drugs through private sector essential drug lists, distribution incentives, price controls, or other measures have been initiated in Peru, Senegal, Nepal, Indonesia, and Zimbabwe. At least two of these programs have involved perverse pricing incentives (lower margins on essential drugs, higher margins on brand name drugs) which have inadvertently discouraged the sale of essential drugs. Unfortunately, there appears to be little documentation of the impact of these efforts.

Constraints to providing ORS, selected antibiotics, antimalarials, or other child survival pharmaceuticals safely and effectively through the private sector include access, affordability, quality, and assuring appropriate use under circumstances of limited training and strong economic pressures toward non-therapeutic dispensing.

Educational programs. Potential private sector involvement in educational programs is typified by Warner-Lambert's Tropicare program. But there have been few efforts to improve the dispensing of drugs by drug shops, patent medicines, local healers, and others who have become a part of the informal distribution network.

In one innovative program the Government of Nepal, with UNICEF assistance, instituted a course for the generally untrained retailers who operate an estimated 1500 drug shops throughout the country. The course proved popular and is now entering its six year. Unfortunately, the course focuses on pharmaceutical science issues and legal requirements: it fails to highlight the few child survival messages which could substantively affect morbidity and mortality. There are undoubtedly other such examples which, along with the Nepal experience, should be documented and used to stimulate further activity in this area.

Involvement in supply management. During the 1980's a number of pharmaceutical companies have worked with national governments to help strengthen management of public drug supply. Examples include the U.S. industry's efforts in the Gambia and Sierra Leone, Warner-Lambert's Tropicare program in several African countries, the Swiss industry's work in Burundi, the French industry's in Senegal, and the German industry's in Malawi.

In addition to industry-initiated efforts, several countries have attempted to structure their essential drug programs to take advantage of private sector strengths in their countries. In the 1970's Peru's Basic Medicines Program, recognizing its limited capacity to store and distribute pharmaceutical products, maintained no central or regional medical stores. Instead, supply contracts specified that deliveries be made directly to major health facilities, from which they were distributed locally to primary health facilities. Similar distribution arrangements characterize the decentralization of Indonesia's essential drug distribution system.

Regulation. Regulatory efforts with respect to child survival focus primarily on banning popular, but dangerous and/or distracting antidiarrheal preparations. Pharmaceutical price controls are one of the most common forms of regulation, but enforcement is difficult and there few, if any, examples of regulating pricing for child survival products other than ORS.

3. Conclusion

Experiences to date in the areas of cost-recovery and essential drugs as they relate to child survival efforts suggest the following lessons and issues:

- Limited allocation of government financial resources to health is still a major constraint in most developing countries.
- Child survival efforts compete for scarce resources against various other interests including strong public demand for essential drugs. Child survival visits (immunization, sick child care, and antenatal-postnatal care) constitute 40-60% of public health service contacts in some countries, yet expenditures on vaccines and drugs for this group generally represent a much smaller percent of the drug budget.

- A.I.D.'s approach of building institutional capacity in the area of drug supply management has succeeded, at least in some countries, in increasing the supply and controlling the costs of essential drugs.
- Essential drugs represent the one element of primary health care for which people are willing to pay and which consistently draws families to health centers. Lack of essential drugs is perhaps the most frequently cited reason for people not participating in public health services.
- While recent experiences from Africa -- notably Benin and some states of Nigeria -- suggest that locally managed programs can generate revenue from essential drug sales well in excess of the replacement costs of drugs sold, most documented experience suggests more modest return. We are unaware of examples of national level cost-recovery through revolving drug funds that have been self-sustaining.
- Efforts to promote child survival objectives through the private sector have been confined largely to ORT, with only limited efforts directed toward other essential drugs. Private sector expenditures may represent 50 to 90 % of total pharmaceutical expenditures -- a considerable health investment if directed to child survival.

FIGURE 1

PHARMACEUTICAL ORDERING
COMPARED TO ESTIMATED NEED
FOR SELECTED CHILD SURVIVAL PHARMACEUTICALS

INDONESIA, SEVEN PROVINCES, 1984-1985

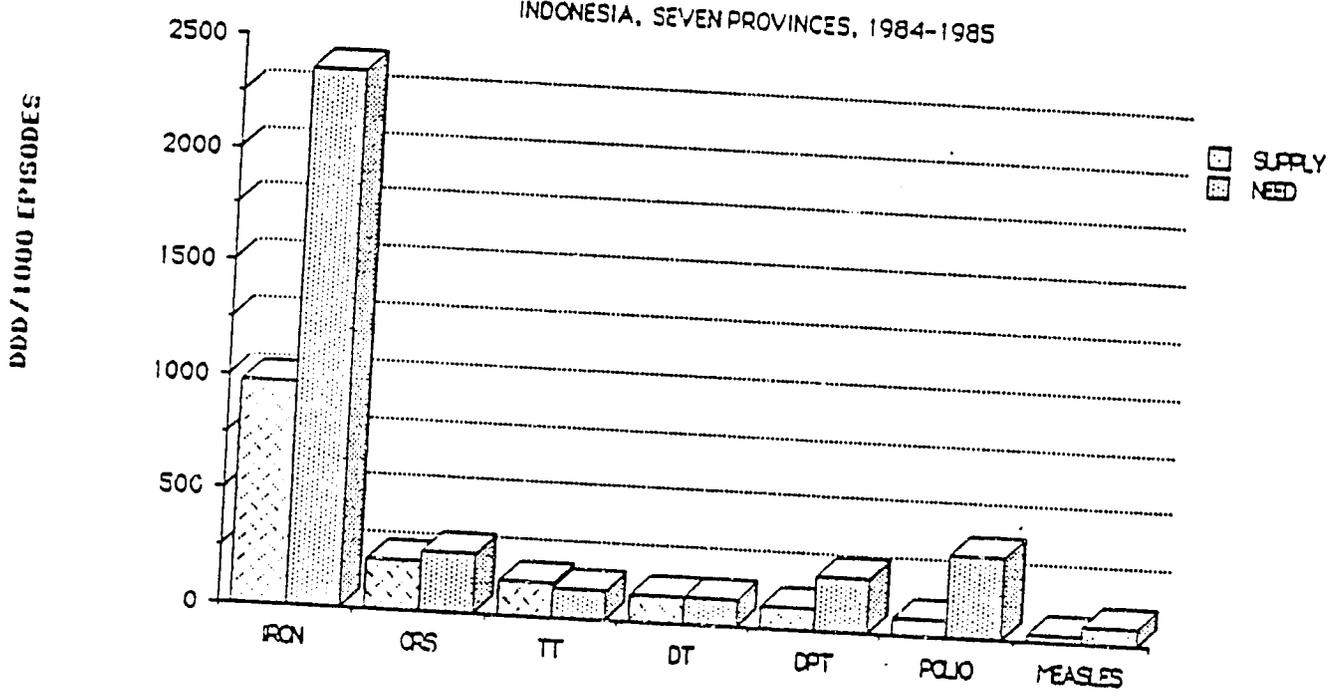


FIGURE 2: ILLNESS AND WELL-CARE HEALTH UNIT PRESCRIBING EPISODES
7 PROVINCES, INDONESIA, 1984/85

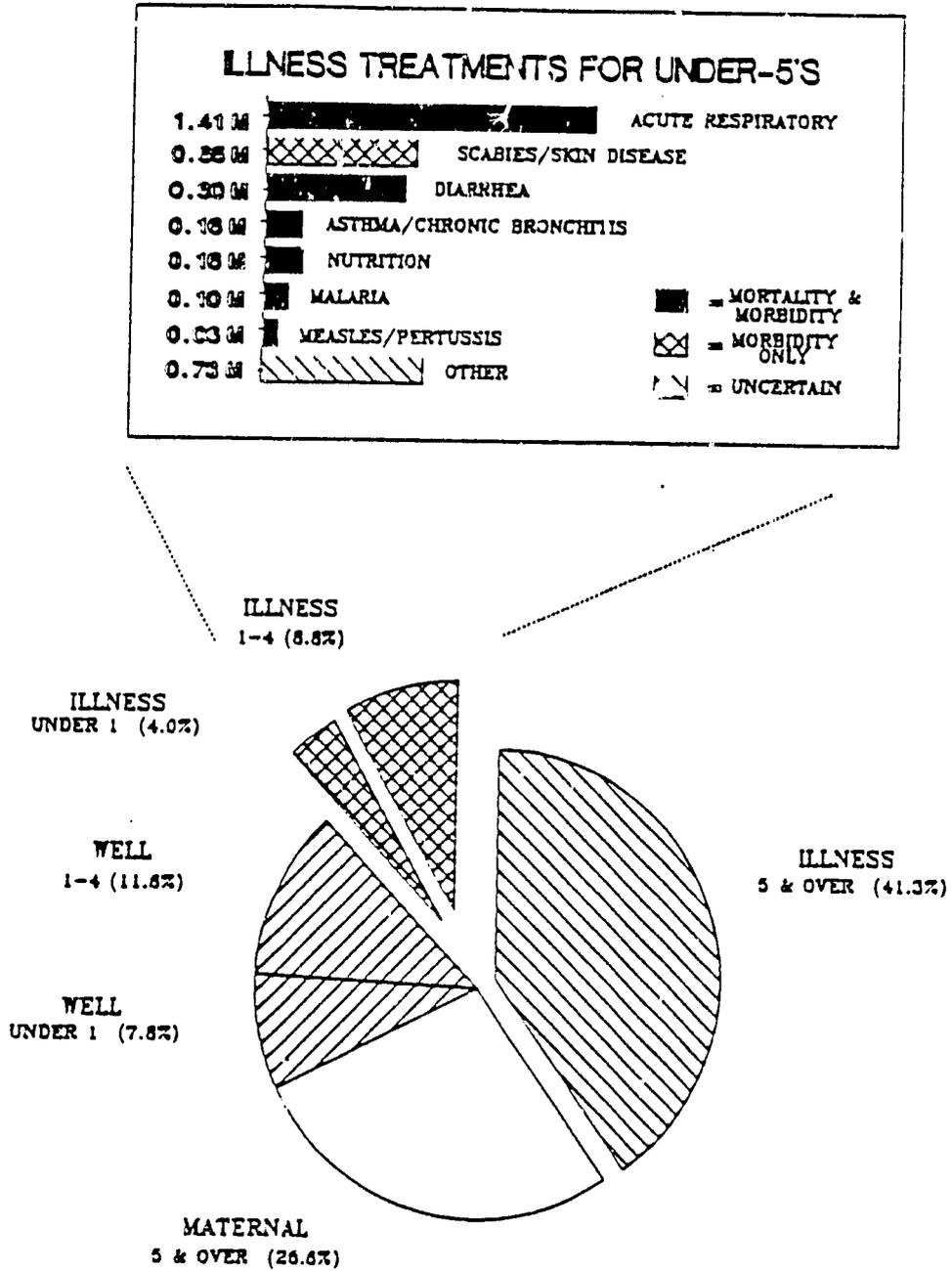


FIGURE 3 DISTRIBUTION OF DRUG BUDGET BY VISIT TYPE
 BASED ON ESTIMATED MORBIDITY-BASED DRUG NEEDS
 7 PROVINCES, INDONESIA, 1984/85
 (RUPIAHS PER VISIT INDICATED BY BARS)

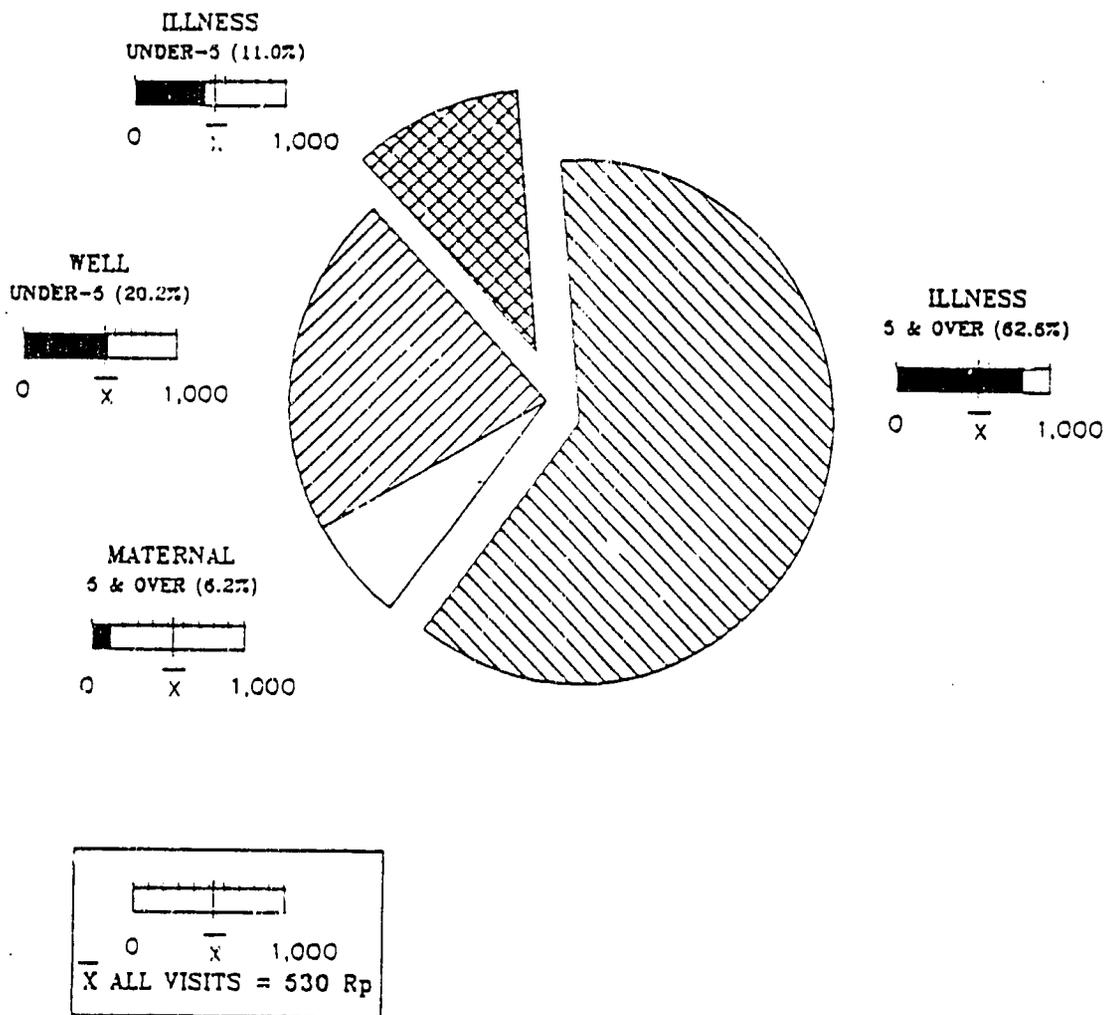
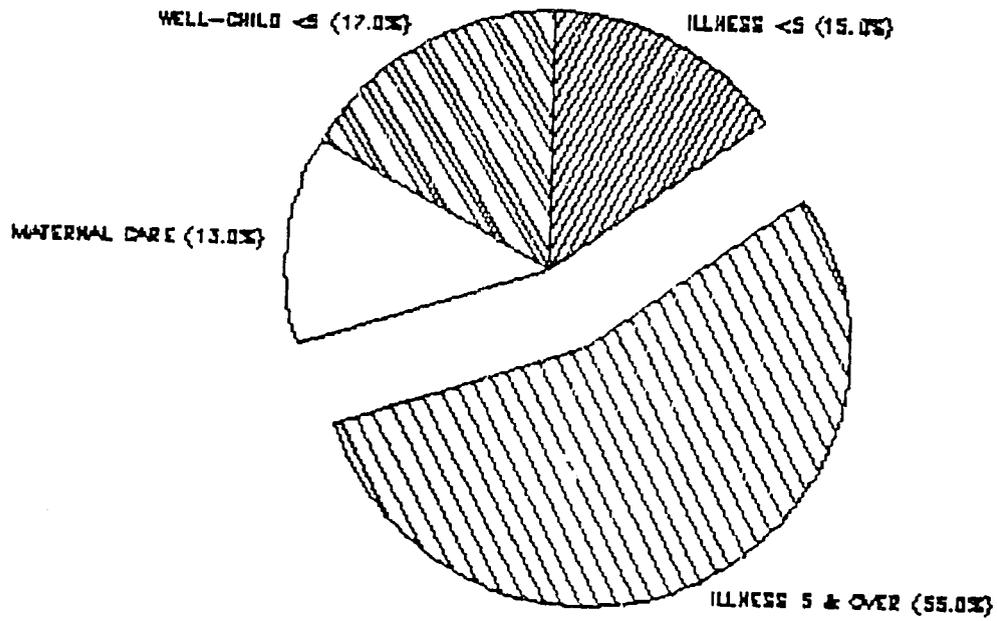


FIGURE 4
NIGERIA, IMO STATE



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Child Survival, Cost-Recovery, and Essential Drugs:
The Bamako Initiative

Introduction

A major theme of A.I.D.'s health efforts in recent years has been the promotion of child survival strategies, with major emphasis on increasing both ORT use and immunization coverage. In these efforts, A.I.D. has consistently tried to work with developing countries to build health care systems that can be sustained with locally available resources. Work has usually focused on development of management systems, training, and some commodities. More recently, we have begun to work on financing alternatives as well as possible shifts of some health care costs from the public to the private sector.

UNICEF has focused principally on improving immunization coverage as rapidly as possible, on MCH services, and on community mobilization efforts. It has devoted only limited attention to strengthening long-term human and institutional capacities to deliver services.

Summary of the Bamako Initiative

Introduced in a September, 1987, speech by Mr. Grant to African Ministers of Health in Bamako, Mali, the "Bamako Initiative" aims to finance the local costs of the primary health care system largely by the sale of essential drugs at the community level. The program would seek to raise \$100 million yearly to help with the foreign exchange requirements for drug purchase. It is proposed that this fund plus contributions from governments would provide essential drugs for those currently unreached.

In its early stages, this initiative would focus on selected countries in Sub-Saharan Africa, possibly including other countries later. Participating countries would have to have (1) a national plan for the development of MCH services in the context of a comprehensive integrated PHC program, (2) a national drug policy which includes the provision of essential drugs, and (3) a commitment to both community financing (which may take different forms in different countries) and management of resources at the community level, while protecting the poorest.

This initiative is seen as a major thrust toward achieving local financing for a primary health care system that could encompass virtually all of sub-Saharan Africa during the 1990's. UNICEF recognizes the challenges that lie ahead in implementing an effort of this magnitude, and the need for collaboration and coordination with other agencies for it to succeed.

Relevant Experience and Lessons

Experiences to date in the areas of cost-recovery and essential drugs as they relate to child survival efforts suggest the following realities:

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- o Limited allocation of government financial resources to health is still a major constraint in most developing countries.
- o Child survival efforts compete for scarce resources against various other interests including strong public demand for essential drugs. Child survival visits (immunization, sick child care, and antenatal-postnatal care) constitute 40-60% of public health service contacts in some countries, yet expenditures on vaccines and drugs for this group generally represent a much smaller percent of the drug budget.
- o A.I.D.'s approach of building institutional capacity in the area of drug supply management has succeeded, at least in some countries, in increasing the supply and controlling the costs of essential drugs.
- o Essential drugs represent the one element of primary health care for which people are willing to pay and which consistently draws families to health centers. Lack of essential drugs is perhaps the most frequently cited reason for people not participating in public health services.
- o While recent experiences from Africa -- notably Benin and some states of Nigeria -- suggest that locally managed programs can generate revenue from essential drug sales well in excess of the replacement costs of drugs sold, most documented experience suggests more modest return. We are unaware of examples of national level cost-recovery through revolving drug funds that have been self-sustaining.
- o Efforts to promote child survival objectives through the private sector have been confined largely to ORT, with only limited efforts directed toward other essential drugs. Private sector expenditures may represent 50 to 90 % of total pharmaceutical expenditures -- a considerable health investment if directed to child survival.

Issues and Implications for A.I.D. Policy and Programs

The UNICEF approach to child survival, cost-recovery, and essential drugs, as embodied in the Bamako Initiative, offers important possibilities for improved child survival. Yet experiences from a variety of countries raise some concerns about the Initiative as it is currently developed:

- o over-estimation of the revenue generation potential of essential drug sales;
- o under-estimation of full pharmaceutical resupply costs when vaccines, MCH needs, other essential drug requirements and management of the supply system are considered;
- o inadequate attention to the human resource and organizational infrastructure requirements for sustainability; this includes the management and local institution-building capacity needed to operate essential drug and cost-recovery systems;
- o the need to provide intensive training to health providers to ensure proper use of essential drugs and to structure payment schemes in ways which do not provide incentives for over-use of pharmaceuticals; and

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o limited experience with essential drug cost-recovery programs which have "gone national".

In addition to these concerns, the Bamako Initiative raises several issues and implications for A.I.D. programs:

The Role of Cost-Recovery in Child Survival -- We are concerned that human and financial resources invested through the Bamako Initiative will be directed primarily to expanding the supply of essential drugs at public health facilities and that this effort would divert attention and resources from activities more directly related to child survival.

There are, however, three potential outcomes of the Bamako Initiative which could contribute directly to financing child survival. First, if the supply of essential drugs for adult health care can be made self-sustaining through revolving drug funds, then funds currently allocated to essential drugs (however inadequate at present) could be re-directed to the supply of vaccines, ORS, and other child survival services for which there is less demonstrated willingness to pay. This would require that these same funds not be diverted to high technology, hospital care, or other sectors.

Second, revolving drug funds provide a specific structure within which to build critical financial management skills appropriate to each level of the health system. As programs expand these basic financial management skills could readily be applied to other aspects of child survival.

Third, the demonstrated willingness to pay and tangible return implicit in pharmaceutical cost-recovery provide an excellent point of entry on which to build confidence in and support for other revenue-generating mechanisms.

Equity and the Preservation of Child Survival Objectives -- The attempt to meet cost-recovery objectives through charging policies must avoid the potential creation of disincentives for precisely those groups that child survival efforts are trying to reach: (1) infants, children, and mothers, for whom limited and mostly anecdotal evidence suggest that use of health services is price sensitive, (2) the poorest of the poor, and (3) primary care outpatient services, rather than hospital services.

To maintain its objective of expanding coverage and participation in health services, A.I.D. assumes that preventive services such as immunization and oral rehydration will be exempt from charges, unless carefully monitored experiences clearly show that drug fees increase the availability of ORT and vaccines without decreasing demand. Thus, pricing and exemption policies must preserve child survival objectives, while achieving adequate revenue-generation.

Realistic Cost-Recovery Expectations -- Planning for cost-recovery schemes should be based on realistic expectations, and not the experiences that have been documented in only 1 or 2 places where all the factors contributing to success may not be fully understood. While it may be possible to exempt immunization and maternal and child health care visits, cross subsidized by charges for other visits, it should be kept in mind that the MCH visits may account for half of all patient contacts, implying

a considerable markup on other visits if revenue is meant to cover all pharmaceutical costs. This issue will require close monitoring of early experiences.

Alternative Mechanisms for Financing Child Survival -- While drug sales may be the most acceptable approach to cost-recovery, there is a wide range of other possibilities, including visit fees, insurance, other prepayment schemes, the creation of cooperatives, and special fund raising events. Since drug sales seem most acceptable in many circumstances, they should be seen as an important entry point for possible later expansion to alternate financing for the full range of PHC services.

We are concerned that efforts also be made to improve the use of available financial resources through re-evaluation of resource allocations and cost containment efforts. Allocating the resources for pharmaceutical procurement toward those items which are most cost-effective can expand the supply of vaccines, ORS, antibiotics for ARI, and other essential drugs. Cost containment can be achieved through careful selection, wise procurement, efficient distribution, improved cold chain management and promotion of appropriate drug use.

Impact on the Pharmaceutical Industry -- Consideration of pharmaceutical industry interests suggests that the Bamako Initiative would be seen as adverse to industry primarily if it were to advocate restricted essential drug lists for the private sector -- which it does not -- or if it were to attract large numbers of patients away from functioning private sector supply systems.

With respect to the latter issue, we would generally support those cost-recovery efforts meant to extend child survival and essential drug services to previously under-served populations. The factors which currently make private sector drug purchases popular -- including brand name preference, accessibility, waiting time, and convenience -- would continue to operate even in the context of public sector essential drug cost-recovery programs. (The impact of these factors is clearly shown in Egypt, where 60 % of all ORS is sold through private channels, while the identical product is available free at government health facilities.)

In terms of market potential, the total African pharmaceutical market is barely 3% of the world market (\$2.7 billion in 1985) and the proposed investment of \$100 million per year represents an equally small portion of this total. We would support countries developing their own ability to procure high quality drugs through open competition among qualified suppliers. Some U.S. manufacturers, particularly generic manufacturers, compete in this environment and do so successfully.

Finally, the Bamako Initiative contains no new essential drug concepts. Procurement by generic name, a fundamental aspect of competitive essential drug procurement, is now a well-established practice. Research-based U.S. drug companies market "branded generics." The U.S. government and major private health institutions purchase using generic names.

Management Requirements -- Experience suggests that self-sustaining cost-recovery schemes are substantially more difficult to manage than free-drug systems. All activities of the supply system -- including

estimating quantities needed, procurement, warehousing, inventory management, distribution, and financial administration -- become critical in establishing a successful cost-recovery scheme. The strengthening of these activities is already a part of many A.I.D. programs in the health sector. Development of the management capacity to operate a cost-recovery program may be one of the best investments in building overall capacity to achieve long-run sustainability.

Conclusion

While A.I.D. is in support of UNICEF's basic goal of strengthening and expanding child survival services, the Initiative as currently conceived includes a set of assumptions and balance of activities which A.I.D. would not fully endorse. However, we see two critical opportunities in the Initiative which we would actively pursue with UNICEF:

- (1) the opportunity to build a sustained commitment by countries to child survival in a manner which does not divert human, organizational, and financial resources from the core activities of immunization and ORT; and
- (2) the likelihood that essential drug cost-recovery would lead to other financing reforms -- including cost containment measures, consideration of alternative financing mechanisms, re-evaluation of resource allocation decisions, and improved financial management skills.

A.I.D.'s participation would emphasize a continuing policy dialogue with UNICEF and program support in selected areas. Specific areas on which UNICEF and A.I.D. could initially work together include the following:

- (1) Clearer definition of the policy implications and operational linkages among child survival, cost-recovery, and essential drugs.
- (2) Continued attention and support for all aspects of sustainability, including human resources, institutional development and financing.
- (3) Comprehensive review of experience with revolving drug funds and other efforts at community financing of essential drugs.
- (4) Support for efforts to develop, implement, evaluate, and disseminate information on the full range of financing alternatives, only one of which involves pharmaceuticals.
- (5) Development of effective methods for training health workers at all levels in approaches to the prevention and treatment of child survival problems, with emphasis on proper use of essential drugs, in general, and ORT, in particular.

In addition, A.I.D. would pursue efforts for cost containment in public sector pharmaceutical expenditures and improved allocation of pharmaceutical resources. We would also evaluate experiences to date involving the private sector in the social marketing of ORS as well as other essential drugs. The aim would be to develop a strategy which would encourage greater sharing of the burden for child survival by the private sector through increased use of ORT, appropriate treatment of ARI, and antenatal prevention of anemia and vitamin deficiencies.