Primary health care: from aspiration to achievement

A review is presented of Senegal’s response to the Bamako Initiative, aimed at strengthening primary health care. The experience gained is of broad interest since the basic principles involved are the same everywhere. Of particular importance are users’ financial contributions and improved organization and management.

Since the Declaration of Alma-Ata in 1978, developing countries have thoroughly restructured their health systems and redefined their public health policies. Priority has been given to preventive medicine and community-based curative primary care, and this has meant concentrating on the construction and equipping of health posts and health huts, the selection, training and supervision of community health workers, and the preparation and implementation of specific programmes of primary preventive and curative care. In Senegal, 1333 health huts have been constructed, together with over half the 673 health posts in the national health system, and thousands of community health workers have been selected and trained. In all these activities, mostly financed from abroad, an effort has been made to involve local people from the design stage to the evaluation of results.

In many countries such endeavours have produced tangible results. Infant mortality has been significantly reduced almost everywhere; in Senegal it fell from 120 per 1000 in the 1970s to 86 per 1000 in the 1980s.

However, problems occurred and had to be tackled in order to hasten the attainment of the health-for-all goals. There was a shortage of local financial resources to provide continuous support for major primary care activities; most programmes funded from abroad were of the vertical kind; and the training of people responsible for the implementation of primary care was inadequate.

This situation produced adverse consequences, among them the following:
- chronic lack of resources, including essential drugs;
- demoralization of health workers;
- uncontrolled development of health care systems in parallel with national systems;
- tendency to convert vertical programmes funded from abroad into commercial enterprises.

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Against this background, national health systems almost everywhere in Africa have become disorganized, activities have been conducted inefficiently, and there has been a steady rise in the cost of services, which are therefore becoming increasingly inaccessible to the poorest populations.

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In 1987 the Bamako Initiative was launched with the aim of correcting the main gaps and inadequacies in the implementation of primary health care. This meant securing the financial resources required to support the implementation of community-based primary health care activities, through increased participation by the population, and improving the organization and management of national health care systems based on primary health care. Senegal, in fact, has been making major efforts in these two areas since 1978.

In Senegal the financing of basic health care is to a large extent borne by the general public. Health committees, elected by the populations around the health units, are responsible not only for the collection and management of income but also for the health facilities, in partnership with state personnel. A token contribution is made by each person each time he or she uses a service. For a medical consultation the contribution ranges from 100 to 300 CFA francs (about US$0.40–1.20) for adults and from 50 to 100 CFA francs ($0.20–0.40) for children; for admission to hospital it is 1000–1500 CFA francs ($4–6); and for childbirth or surgery it ranges from 3000 to 15 000 CFA francs ($12–60). These contributions yield 500–600 million CFA francs ($2–2.4 million) annually. Of this amount, representing over 50% of the funds allocated to decentralized structures, at least 80% goes to meet operating costs. The majority of the decentralized communities, communes and rural communities also participate in the state’s health effort. Some allocate the equivalent of 8–10% of their budget to health. Much of this money is assigned to the construction or renovation of community health facilities. Nevertheless, funding for priority health care activities is still very inadequate. In Senegal the public health services have similar problems to those experienced in other developing countries:

- chronic shortages of essential drugs;
- rapid increase in the number of private pharmacies;
- uncontrolled development of parallel markets in drugs that are badly stored and have often passed their expiry dates;
- demoralization of personnel because of inadequate working facilities;
- development of clandestine private practice;
- gradual rise in the cost of services, making them increasingly inaccessible to the poorest people;
- increasing temptation to divert products provided for the public sector to the parallel markets;
- loss of faith in and abandonment of the public health services by the population;
- growth of a lucrative private sector, which only well-off people can afford.

Under these circumstances the primary health care strategy tends to be discredited in the eyes of medical staff in the public sector. A medium-term plan for social and
health development has been drawn up for each health district and medical region, while management structures at both the district and regional levels have been redefined and their roles and responsibilities respecified. Past achievements had to be preserved while new principles and methods specific to the new strategy were introduced. It was necessary to define a Senegalese version of the Bamako Initiative in keeping with the country’s progress in the implementation of primary care.

**Essential drugs**

Under its Human Resources Development Project, Senegal’s Ministry of Public Health and Social Action funded studies and workshops on the definition of a list of essential drugs. An expert committee considered the predominant pattern of disease in the country, the list proposed by WHO, the list of drugs that had been in use in the public sector for a number of years, and the products authorized for sale by the Ministry’s Control and Approval Office. The most commonly encountered diseases were infectious diseases, deficiency diseases and congenital diseases.

For their treatment some 3000 medicines were authorized, most of them on sale in private pharmacies. Of the annual turnover of about 15 000 million CFA francs ($60 million), the total cost of drugs available in Senegal, between 13 000 million and 14 000 million CFA francs ($42–56 million) were controlled by the private sector in 1991. All the medicines were sold under brand names, which were inordinately more costly than the generic equivalents. The committee proposed lists of essential drugs under generic names for the various levels of the system. After revision the lists were adopted under a ministerial order in which methods of use were indicated. Lists of 14, 32, 69 and 250 substances were presented for health huts, health posts, health centres and regional hospitals respectively.

**Estimation of needs**

Needs were estimated by the national committee responsible for the design of the Human Resources Development Project, using data obtained from health units. On the basis of information on numbers of patients and consultations, together with an analysis of the most frequent infections by age and sex, the committee arrived at an estimate of the needs for essential drugs. The initial requirement was calculated to be 30 000 CFA francs ($120) for health huts, 800 000 CFA francs ($3200) for health posts and 5 million francs ($20 200) for health centres. The initial funding requirement for regional hospitals was not estimated at this stage. Consideration was given to possible sources of the sums required.

**Sources of initial funding**

The committees compiling essential drug lists, drawing up the Human Resources Development Project, and monitoring the

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Drafting of regional and district health development plans, were made up of virtually the same people. The same groups were responsible for looking into possible sources of initial funding. The committee
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drawing up the Human Resources Development Project was well advanced in this direction, having identified:

- the World Bank project within the framework of the Human Resources Development Project;
- the drugs budget of the Ministry of Public Health and Social Action;
- 60% of the income derived from charges on patients for drugs;
- other funding agencies and nongovernmental organizations involved in the health sector.

Prescription guides were prepared in the form of flow charts; the quality of diagnosis was thus improved and costs were reduced through the rationalization of therapeutic regimens.

Meanwhile, Switzerland decided to donate drugs valued at 12 million Swiss francs (US$ 8.5 million). This allowed all the health posts and health centres to be supplied with drugs in accordance with the estimates made by the various committees, and meant that the contributions from the other sources could be directed more towards hospitals and the accumulation of reserve stocks for the National Supply Pharmacy. At this stage, reliable organization of the financial flows in respect of drugs had not yet been perfected.

Reorganization of drug supplies

As part of the effort to strengthen institutional capability the Human Resources Development Project/World Bank project had initiated work on restructuring the National Supply Pharmacy and conferring on it special status so that it could be managed independently. This work had to be speeded up and redirected towards meeting the aspirations of the Bamako Initiative. Special attention was laid on the need to centralize orders at the National Supply Pharmacy and enable it to call internationally for tenders. Thus the same supply and distribution system was maintained but its organization and mode of operation had to be strengthened. The National Supply Pharmacy will continue as a distributing wholesaler for the regional pharmacies. The supply and distribution system is made up as shown in the figure.

The health posts, rural maternity units and health huts replenish their supplies at the community depots, which are managed by the local populations. The district depots supply the health centres and community depots.
Distribution and use of essential drugs

At the health centres, drugs are handed out by the nurses who attended to the distribution of drugs at the retail pharmacies. They are supported by community health workers, who collect the payments and keep the finance management documents and the records of incomings and outgoings of drugs and medical equipment. The nurses unpack the products supplied in hospital packs and distribute them, taking care to explain the prescriptions clearly to the patients.

At the health posts and community depots a trained community health worker attends to all the above tasks. In all cases the basic principle is that the drugs are routinely supplied against payment. Whether they are paid for by the patient or by a third party, the cost is always recovered in order to guarantee replenishment of stocks. Charges vary very little from place to place or between health units, being laid down in a circular issued by the Ministry of Public Health and Social Action. The authorized profit margin varies from 1% to 10% of the purchase price at the National Supply Pharmacy. Although the suggestion has been made that drugs should be sold at a profit so that other community-based primary care activities could be financed, the system of token contributions to the state health effort has been retained.

These payments by members of the public bring in 500–600 million CFA francs ($2–2.4 million) a year. This amount is managed by the health committees that help to run the health facilities in the localities. In the future it should be possible to use 60% of the money collected for funding community-based primary health care activities, rather than drug purchases. The Ministry is thus seeking to maintain the contribution of members of the public to the health effort, while introducing the component of the Bamako Initiative strategy which ensures that drug stocks are constantly replenished.

New management tools were designed and made available: they included special registers of incomings and outgoings, stock cards, inventory cards, order books and receipt books. For prescribers, prescription guides were prepared in the form of flow charts; the quality of diagnosis was thus improved and costs were reduced through the rationalization of therapeutic regimens.

The new place of users in the structure should enable them to receive explanations about drugs from at least two sources: the prescriber at the time of the consultation and the distributor when the drugs are acquired. In addition, however, information and awareness activities on the dangers of poor self-medication are conducted by district health education officers.

Difficulties and constraints

Full application of the strategy was necessary from the outset because the drugs donated by Switzerland were available at all the targeted health units. The main difficulties were associated with inadequate awareness,

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The full implementation of the Initiative right from the outset met with opposition from private pharmacists. Initially they said the community depots were illegal and subsequently, through their trade union and the pharmacists' council, claimed that the implementation of the Initiative was contrary to the laws governing drugs in Senegal. The practical aspects of implementation were criticized, especially the opening of large packs of drugs and the sale of small quantities taken from them by community health workers. Many discussions on these matters were held with all the sectors involved. Meanwhile, the population and the community health workers in the rural areas were praising the Initiative, which gradually gained wider acceptance.

Resistance also came from medical personnel accustomed to both giving consultations and supplying drugs themselves. They were not satisfied with confining themselves to clinically examining patients and prescribing treatment. Indeed, distributing the drugs seemed to be the task that interested them most. This problem is gradually being resolved. It is expected that, as training proceeds and as the work of supervision and public information continues, all forms of resistance to implementation of the Initiative will subside. Encouraging results can already be seen in most districts, and some regional hospitals are insisting on becoming involved.

Achievements

Among the principal achievements are the following:

- compilation and dissemination of lists of essential drugs for different levels of care;
- supplying initial stocks to health posts and health centres;
- drafting and promulgation of a new legal text reorganizing committees for public participation in health management;
- drafting and distribution of a ministerial circular laying down ways and means for collection and management of income derived from the population's contributions to the health effort;
- restructuring of the National Supply Pharmacy, making it independent and giving it a better-organized quality control unit;
- training for all the chief regional and district medical officers and prescribing nurses;
- development of management tools and their introduction in three test districts;
- preparation and distribution to all health units of a guide to the therapeutic management of diseases and everyday emergencies;
- preparation and testing of flow charts of clinical pathways (symptom patterns — diagnoses — treatments or referrals).

At the operational level a mini-evaluation has been conducted in five district health centres after three months of application of the Initiative, and some of the quantitative
results have been analysed. Attendance increased between twofold and fourfold over this period and there was a rise in income from token contributions. Prescriptions were given to about ten patients in two of the health centres, but patients were otherwise treated with drugs available at pharmacies attached to health centres. The average treatment cost per disease episode was around 500 CFA francs ($2) for outpatients and 1500 CFA francs ($6) for inpatients. Four of the five managers were making proper use of the management tools. The prescribers who were evaluated were all using rationalized treatment schedules as they had been taught and as summarized in the flow charts.

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Large numbers of people are involved in implementation of the Bamako Initiative because of the variety of fields concerned, and this makes it particularly difficult to select a methodology. Furthermore, one has to contend with people’s natural tendency to resist change. The methodological aspects of applying the Initiative therefore have to be thoroughly studied so as to maximize the chances of success. Although the Senegalese example is quite specific, the basic principles are the same everywhere. Only the way of applying them differs from one country to another. The essential prerequisites everywhere are information, awareness and the involvement of everyone directly or indirectly concerned with the problems of drugs and of health in general.

The attainment of health for all is possible only through the proper application of primary health care. The Bamako Initiative presents a sound approach to the strengthening of primary health care and making it accessible to the poorest people, and is the best way of ensuring that community-based primary health care programmes are funded jointly by community and state.