

The impact of the Global Polio Eradication Initiative on the financing of routine immunization: case studies in Bangladesh, Côte d'Ivoire, and Morocco

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Abstract To determine if the Global Polio Eradication Initiative (PEI) affected financing of routine immunization programmes, we compared sources and uses of funds for routine immunization programmes and PEI activities in Bangladesh, Côte d'Ivoire, and Morocco for the years 1993–98. We also examined funding trends for these years in these countries and assessed the effect of the initiative on the availability of specific resources in national immunization programmes, such as cold-chain equipment and personnel time spent on activities related to national immunization days and surveillance of poliomyelitis and acute flaccid paralysis. We found that all three governments and the majority of donors and international organizations continued to fund routine immunization programmes at levels similar to those before the PEI. Trend analysis also indicated that financing for routine immunization in each of the countries continued to increase after the PEI was introduced. The results show that the PEI did not reduce funding for routine immunizations in these countries.

Keywords Poliomyelitis/prevention and control; Immunization programs/economics; Financing, Government/trends; Financing, Organized/trends; Health expenditures/trends; Comparative study; Case report; Bangladesh; Morocco; Côte d'Ivoire (*source: MeSH, NLM*).

Mots clés Poliomyélite antérieure aiguë/prévention et contrôle; Programmes de vaccination/économie; Financement par gouvernement/orientations; Organisation financement/orientations; Dépenses de santé/orientations; Etude comparative; Cas clinique; Bangladesh; Maroc; Côte d'Ivoire (*source: MeSH, INSERM*).

Palabras clave Poliomiélitis/prevención y control; Programas de inmunización/economía; Financiamiento gubernamental/tendencias; Organización del financiamiento/tendencias; Gastos en salud/tendencias; Estudio comparativo; Informe de caso; Bangladesh; Marruecos; Côte d'Ivoire (*fuentes: DeCS, BIREME*).

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Introduction

Considerable progress has been made in eradicating poliomyelitis, thanks to the Polio Eradication Initiative (PEI), led by WHO, the United Nations Children's Fund (UNICEF), and a number of bilateral donors. However, the initiative has required considerable financial and other resources from ministries of health and other local and external sources, which raised the question as to whether resources for routine immunizations were adversely affected by the focus on the PEI. In the 1990s, global funding for routine immunization programmes in developing countries declined sharply for several reasons, including funding reductions from the United States Agency for International Development (USAID) after the cold war ended; competition from health services, such as those for human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) and other health priorities; and a reduction in UNICEF funding after Universal Child Immunization ended in 1990. During the 1990s, initiatives to control and eliminate diseases also became more frequent.

The PEI began in 1988 and has since reduced the global incidence of poliomyelitis. The WHO Region of the Americas was the first region to certify eradication in 1994, although one

outbreak of vaccine-derived poliomyelitis has since occurred. The WHO Western Pacific region was certified poliomyelitis free in October 2000, and the WHO European Region was declared poliomyelitis free in June 2002. The two regions with the highest incidence of poliomyelitis are the WHO African Region and the WHO South-East Asia Region, although the frequency of cases is much lower than a decade ago.

Critics of eradication initiatives have argued that they divert resources and undermine efforts to maintain and strengthen routine health services. In the least-developed countries poliomyelitis eradication has had both positive and negative impacts on the development of health systems (1, 2). The positive impacts on routine health services resulted from the emphasis on social mobilization and improving management as part of the targeted initiatives. In poorer countries, however, targeted immunization programmes diverted resources away from routine services, especially during mass immunization campaigns.

Other studies also found that poliomyelitis eradication efforts had both positive and negative impacts. The development and strengthening of acute flaccid paralysis surveillance in the Philippines, for example, improved surveillance for other diseases (3), whereas poliomyelitis eradication initiatives in the

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Lao People's Democratic Republic, Nepal, and United Republic of Tanzania had both positive and negative impacts on the health system, depending on the level of development of the health system, the management capacity of personnel, and the level of integration of the health infrastructure (4). Positive impacts were more likely when sufficient planning was in place. It should be noted, however, that these three countries may not have been representative of other countries in their respective regions.

In the present study, we examined whether trade-offs occurred for routine immunization programmes, when governments, donors, and international organizations provided funding for the PEI.

Data collection

We collected data in Bangladesh, Côte d'Ivoire, and Morocco — chosen as part of a larger study on the financing of immunization programmes — since the countries had a mix of financing sources and were located in different geographical regions. However, the countries all had diphtheria, pertussis, and tetanus coverage rates greater than 60% and are not representative of countries with programmes that function less well.

We collected information on sources and uses of funds for routine immunization programmes and poliomyelitis eradication activities by the governments, donors, and other contributors (5–7). Although poliomyelitis eradication activities only began in 1995–96, funding for surveillance and planning activities began in 1993–94. The sources of financing included national governments, local (regional) governments, donors, international organizations, and the private sector.

Morocco differs from the other two countries since it was already conducting national immunization days before the PEI was started as a means of supplementing routine immunization activities. National immunization days were used to improve immunization coverage, since disparities in coverage rates existed, particularly in rural areas. When the initiative began, poliomyelitis immunization for children aged 1–5 years old was included in national immunization days.

Expenditure was divided into recurrent and capital expenses. Recurrent expenditures occurred within one year or less, such as personnel salaries and supplies. Capital expenditures were for items that lasted longer than a year, such as equipment and land. Interviews were conducted with key informants to obtain in-depth information on the immunization programmes and long-term prospects for financing. Better estimates of the role of governments in financing these activities were obtained by including the value of personnel time in the analysis, although the analysis did not attempt to separate out the contributions from different levels of staff. Funding data for trend analyses were converted to United States dollars so that data from different sources could be compared. Nominal dollars — which give the value at current prices — were used because inflation of the United States dollar was low during 1993–2000.

The short-term effects of the initiative on financing routine immunizations were examined by trend analysis when information was available. To determine whether the rate of funding for routine immunizations had decreased, routine immunization funding was compared with that for poliomyelitis eradication activities. We also examined whether the rate of funding increase slowed once poliomyelitis eradication activities were introduced. In addition, specific funding

sources were investigated to determine whether individual flows increased or decreased over the same period.

The contributions of the governments of Bangladesh, Côte d'Ivoire, and Morocco for routine immunization programmes and national immunization days were examined separately to assess how governments allocated national immunization programme resources to immunization and poliomyelitis eradication activities. The study also examined whether the governments contributed to the PEI, and examined whether this had long-term effects on financing for their routine immunization programmes.

The possibilities for long-term financing for routine immunization, poliomyelitis eradication, and other health activities were determined from discussions with contributors and key informants, such as ministry officials and donor representatives.

Spending trends for routine immunization and the PEI

The trends in expenditures on routine immunization and poliomyelitis eradication in Bangladesh and Côte d'Ivoire were examined to assess whether expenditures for routine immunization changed as poliomyelitis eradication activities were introduced. Morocco was not included, as there was insufficient information on past expenditures. In Bangladesh, expenditures between 1993 and 1997 on routine immunization comprised an approximately constant 6–7% of total health-sector expenditures (Table 1). Funding for poliomyelitis eradication was also fairly constant at 2% of total health expenditures. However, the annual increase in expenditure was only 1.6% for poliomyelitis eradication, while those for routine immunization and the health and population programme increased by 11–12% (Table 1).

In Côte d'Ivoire, expenditures on the PEI, routine immunization, and the health sector increased between 1996 and 1998 (Table 2). In this country, PEI expenditures were equivalent to NID spending because no information was available on spending on surveillance. Expenditures on routine immunization as a percentage of health sector expenditures remained the same during this period. The expenditures on the PEI increased more rapidly during this period (22–27%), although the value in United States dollars of the expenditures was relatively low and ranged from only 1.1% to 1.8% of total health sector expenditures. The funding for the entire national immunization programme increased at a slower rate (9.1%) than the health budget as a whole (11.3%).

Funding trends for routine immunization and polio eradication

For all three countries, we examined funding trends for the PEI and for routine immunization by source, to determine whether some sources reduced their funding for routine immunization after the PEI was introduced. In Bangladesh, funding for routine immunization either stayed the same or increased for most funding sources (Table 3), and the government of Bangladesh increased its funding for routine immunization, despite some fluctuations. The level of funding of other agencies, such as USAID and WHO, did not significantly change during the period. The three-year moving averages of funding contributions were US\$ 315 099, US\$ 319 230, and US\$ 300 064 for USAID

Table 1. Annual expenditure for polio eradication, routine immunization, and the health and population programme,^a Bangladesh, 1993–97, all sources of funding

Health activity	Annual expenditure ^b					Average annual change (%)
	1993	1994	1995	1996	1997	
Polio eradication						
Annual expenditure (US\$ in thousands)	0	7 104	7 601	7 306	7 430	–
Annual change (%)	NA ^c	NA	7.0	–3.9	1.7	1.6
Routine immunization						
Annual expenditure (US\$ in thousands)	19 833	24 869	19 292	25 379	27 826	–
Annual change (%)	NA	25.4	–22.4	31.6	9.6	11.1
Total: polio eradication and routine immunization						
Annual expenditure (US\$ in thousands)	19 833	31 974	26 893	32 685	35 257	–
Annual change (%)	NA	61.2	–15.9	21.5	7.9	18.7
Health and population programme						
Annual expenditure (US\$ in thousands)	268 100	343 400	357 311	399 591	412 574	–
Annual change (%)	NA	28.1	4.1	11.8	3.2	11.8
% of expenditures on PEI to total health programme	NA	2.1	2.1	1.8	1.8	2.0
% of expenditures on routine immunization to total health programme	7.4	7.2	5.4	6.4	6.7	6.6

^a Includes all expenditures on health, including routine immunization and the Global Polio Eradication Initiative.

^b Expenditures have been converted to US\$ (thousands) to account for inflation during the study period.

^c NA = data not available.

Table 2. Annual expenditure for polio eradication, routine immunization, and the health sector, Côte d'Ivoire, 1995–98, all sources of funding

Health activity	Annual expenditure ^a				Average annual change (%)
	1995	1996	1997	1998	
Polio eradication					
Annual expenditure (US\$ in thousands)	NA ^b	2 009 ^c	2 442 ^d	3 099	–
Annual change (%)	NA	NA	21.5	26.9	24.2
Routine immunization					
Annual expenditure (US\$ in thousands)	NA	7 224	7 409	7 876	–
Annual change (%)	NA	NA	2.6	6.3	4.4
Total: polio eradication and routine immunization					
Annual expenditure (US\$ in thousands)	NA	9 234	9 852	10 976	–
Annual change (%)	NA	NA	6.7	11.4	9.1
Health sector					
Annual expenditure (US\$ in thousands)	132 572	182 566	173 542	175 559	–
Annual change (%)	NA	37.7	–4.9	1.2	11.3

^a Expenditures have been converted to US\$ (thousands) to account for inflation during the study period.

^b NA = data not available.

^c It was assumed that the government contribution towards operational expenses was the same as that in 1998.

^d It was assumed that the German Development Bank contributed US\$ 278 840 (amount contributed the previous year).

and US\$ 143 749, US\$ 158 151, and US\$ 184 890 for WHO (the amounts refer to averages of data from three years, beginning with the base year, base year + 1, and base year + 2. Although UNICEF funding for the routine immunization programme did decrease in 1997–98, this could be attributed to the introduction of the sector-wide approach in the health sector, rather than to a reallocation of funds to the PEI. The Swedish International Development Agency and other donors that previously funnelled contributions to routine immunization (for cold-chain equipment and vaccines) through UNICEF, instead provided their aid as sector-wide pooled funding. The exact contributions for the Swedish International Development Agency could not be

quantified, since the Agency was still making contributions to the routine immunization programme indirectly. Since UNICEF no longer had funds to purchase vaccines, the government of Bangladesh used its World Bank loan instead to purchase vaccines. Funding for the PEI stayed at about the same level for most sources (Table 3), with the exception of the government of Bangladesh, which gradually decreased its contributions.

In Côte d'Ivoire, the government, the European Union Development Fund, and the German Development Bank all increased funding for routine immunization between 1996 and 1999 (Table 4). The contribution from WHO remained the same, while that for UNICEF declined slightly, for unknown

Table 3. Funding sources for routine immunization and polio eradication activities, Bangladesh, 1993–97

Source	Funding ^a for routine immunization				
	1993	1994	1995	1996	1997
Government of Bangladesh	9 329	16 657	15 260	16 387	17 676
World Bank	2 876	4 872	2 989	2 414	9 342
UNICEF ^b	11 461	6 246	6 382	10 419	179
USAID ^c	265	300	379	278	242
WHO	134	200	96	357	100
Government of Japan	0	0	0	475	494
Total funding for routine immunization	24 067	28 275	25 108	30 333	28 034

Source	Funding ^a for polio eradication				
	1993	1994	1995	1996	1997
Government of Bangladesh	0	3130	1113	1003	723
UNICEF	0	1193	349	312	343
CDC ^d	0	315	315	315	735
USAID	0	121	165	198	125
WHO	0	603	603	572	4
Rotary International	0	1637	1601	1497	1608
Government of Japan	0	0	3281	3213	4437
Total funding for polio eradication	0	7001	7429	7113	7976

^a Funding data have been converted to US\$ (thousands) to account for inflation during the study period. The figures in this table do not include all expenditures and are therefore lower than the total expenditure figures in Table 1.

^b UNICEF = United Nations Children's Fund.

^c USAID = United States Agency for International Development.

^d CDC = United States Centers for Disease Control and Prevention. CDC contributed funds for national immunization days through UNICEF and consequently it is not known whether double counting occurred for this funding.

reasons. The contributions of the government of Côte d'Ivoire for poliomyelitis eradication also increased (Table 4). While the contributions of a few donors, such as USAID (through WHO), were lower for 1999 than those for 1998, Japan and UNICEF have filled the gap when required. The contributions of the government of Côte d'Ivoire to both routine immunization and national immunization days increased. The government of Japan pledged to support the PEI and designated its contribution for the cold chain, while the German Development Bank, which has a history of supporting routine immunization but not poliomyelitis eradication, designated its contribution for routine immunization.

In Morocco, the government was the main financier of both the routine immunization programme and the PEI, in contrast to the situation in Bangladesh and Côte d'Ivoire. In 1995 Morocco began to finance all of its vaccines using its World Bank loan (a non-International Development Association loan). The contribution of international agencies to the immunization programme comprised only about 4% of total costs (6). The contributions of the government of Morocco increased for both routine immunization and PEI activities (Table 5, Table 6). For the routine immunization programme, the increases occurred because population growth required additional resources and programme improvements required more funds (6). For the PEI, an acceleration in the implementation of activities increased contributions.

Long-term prospects for financing routine immunizations

In Bangladesh, long-term prospects for financing routine immunizations and health systems have changed little since the

PEI was introduced. Two donors, the government of Japan and Rotary International, used not to fund routine immunization activities, and even though they currently provide funds for poliomyelitis eradication activities, this situation will probably change. Rotary International has a particular interest in funding poliomyelitis eradication activities and other specific programmes, such as AIDS Education, and is unlikely to finance other immunization activities. Also, even though the government of Japan has provided funding for routine immunization vaccines since 1995–96, interviews of staff of the Japan International Cooperation Agency in Dhaka, Bangladesh, in February 1999 indicated that this contribution would end in a few years (Y. Ando, personal communication, 1999).

The effect of the PEI on the long-term financing prospects for Côte d'Ivoire is unclear. If a donor uniquely funded the PEI, loss of this funding would not impact funding for other programmes. Also, the government of Côte d'Ivoire has gradually increased its contribution for poliomyelitis eradication activities and this additional funding could be available for other health sector activities after the PEI finishes.

In Morocco, the most favourable long-term prospects are for the additional resources generated by the government for poliomyelitis eradication vaccines. When the PEI ends, it is possible that the additional contributions of the government could be transferred to the routine immunization programme, since the funds may have been "institutionalized." The government could have directed the additional poliomyelitis eradication funds for the national immunization programme to purchase other vaccines and supplies instead, such as hepatitis B vaccines and disposable syringes. However, it is less likely

Table 4. Funding sources for routine immunization and polio eradication in Côte d'Ivoire, 1996–99

Source	Funding ^a for routine immunization			
	1996	1997	1998	1999
Government of Côte d'Ivoire	5 170	5 303	5 617	5 870
European Union Development Fund	1 720	1 764	1 869	1 953 ^b
German Development Bank	299	306	325	7 280 ^c
WHO	NA ^d	NA	27	29
UNICEF ^e	34	34	37	11
Total funding for routine immunization	7 224	7 409	7 876	15 144
Source	Funding ^a for polio eradication			
	1996	1997	1998	1999
Government of Côte d'Ivoire				
Operational costs	NA	NA	294	711
Personnel	610	626	752	691
Rotary International				
Donations through WHO	1 161	375	279	509
Local donations	0	26	12	8
Government of Japan	0	1 166 ^f	1 120 ^g	^h
USAID ⁱ through WHO	NA	NA	624	298
WHO-Côte d'Ivoire	NA	NA	9	8
UNICEF	50	50	50	218
Total funding for polio eradication	1 821	2 243	3 140	2 443

^a Funding data are given in US\$ (thousands).

^b Financing was blocked due to fraud.

^c The increase in financing was due to the purchase of cold-chain equipment.

^d NA = data not available.

^e UNICEF = United Nations Children's Fund.

^f Contribution for cold chain.

^g National Immunization vaccine and operating costs.

^h According to WHO, 1998 funds from the government of Japan were used in 1999 to buy vaccines and for operational costs.

ⁱ USAID = United States Agency for International Development.

that these resources could have been generated without high-level support, such as that of the PEI and the royal family's strong support and advocacy of the national immunization days.

Discussion

Government financing

Our findings indicate that since poliomyelitis eradication activities were introduced in Bangladesh, Côte d'Ivoire, and Morocco, government financing for routine immunization activities increased. In Côte d'Ivoire and Morocco, the governments also increased their contributions to the PEI. The results suggest that no trade-offs were made in Côte d'Ivoire and Morocco, and that instead the governments increased their overall financing of both routine immunization and poliomyelitis eradication. In Bangladesh, the government concentrated its limited resources on routine immunization rather than on poliomyelitis eradication activities. This was an appropriate choice for the government, since the routine coverage did not increase during 1993–97.

External financing

Financing of routine immunization programmes by most external sources of funding stayed the same (Bangladesh) or increased (Côte d'Ivoire) over the five-year study period. The only organization that decreased its contributions to routine immunization during this period was UNICEF, but the

decreases were probably associated with factors other than the reallocation of funding to the PEI. Some donors (e.g. Rotary International) concentrated their funding on either routine immunization or on poliomyelitis eradication activities and did not need to make any funding trade-offs.

Three important funding sources for the PEI in the countries studied, the United States Centers for Disease Control and Prevention (CDC), the government of Japan, and Rotary International, focused most of their resources on this initiative. It should be noted that CDC and the government of Japan did not finance the PEI programme in Morocco. In only one case was funding also provided for routine immunization — Japan financed the purchase of measles vaccine in Bangladesh — but this contribution was relatively small.

Other donors provided funding only for routine immunization activities (e.g. the German Development Bank in Côte d'Ivoire and the Swedish International Development Agency in Bangladesh). Only a few organizations (USAID, WHO, and UNICEF) funded both activities in at least two of the three countries. None appeared to be reducing their funding significantly for routine immunization activities, with the exception of UNICEF in Bangladesh and Côte d'Ivoire.

In Bangladesh and Côte d'Ivoire, funding for routine immunization activities from most sources generally stayed the same or increased. Where funding decreased, the decline was attributed to reasons other than the reallocation of funds to the PEI. In Morocco, where most of the funding was from the

Table 5. Funding sources for polio eradication, Morocco, 1993–98^a

Funding source	Funding for polio eradication ^b					
	1993	1994	1995	1996	1997	1998
Government of Morocco						
Vaccines	NA ^c	NA	336	742	930	1131
Personnel	NA	NA	1855 ^d	1910	1968	2027
Total	NA	NA	2191	2653	2898	3158
Donor						
UNICEF ^e	115	115	115	121	NA	NA
Rotary International ^f	603	331	15	NA	24	NA
USAID ^g	NA	NA	NA	64	93	57
Total	718	446	130	185	117	57

^a WHO provided funding for National Immunizations days (0), but the exact amount contributed during the study period is not known.
^b Expenditures have been converted to US\$ (thousands) to account for inflation during the study period.
^c NA = data not available.
^d The figure is based on the 1997 value, adjusted for a 3% annual inflation rate.
^e UNICEF = United Nations Children’s Fund. UNICEF funding supported surveillance and social mobilization activities.
^f Rotary International funding supported the purchase of vaccines (in 1993 and 1994), social mobilization activities (1995), and cold-chain equipment purchases (1997).
^g USAID = United States Agency for International Development. USAID funding supported information, education, and communication activities, including meetings.

government, any decrease in funding by donors would have been due to reasons other than financing the PEI.

Prospects for long-term financing of routine immunizations

In Côte d’Ivoire and Morocco, government funding for poliomyelitis eradication activities increased during the study period. To try to keep these funds after the PEI ends and have them allocated to the health sector, policy-makers and programme managers should make plans for the funds and begin lobbying to keep them within the health sector. However, much of the additional funding for the PEI is from donors that provide financing specifically for this activity and not for routine immunization; consequently, the prospects for maintaining funding from them after the initiative ends are not clear. The government of Japan may choose to shift its funding from poliomyelitis eradication to routine immunization, since it funds the latter activity in some countries, but it is not clear that it will do so. It is also possible that donors, such as Rotary International and other international organizations, will shift their funding to another disease eradication initiative, if one is initiated. Despite these concerns, some funds for the PEI were for capital expenditures on equipment and vehicles, which could be used by the routine immunization programme after the PEI ends.

Table 6. Government expenditure^a for routine immunization, Morocco, 1994–97

Expenditure	1994	1995	1996	1997
Personnel	4347	4477	4612	4750
Vaccines	719	893	1001	1287
Maintenance/overheads	165	170	175	181
Totals	5232	5541	5789	6218
Increase (%)	NA^b	5.9	4.5	7.4

^a Expenditure is given in US\$ (thousands).
^b NA = data not available.

It is likely that there were costs in choosing to support poliomyelitis eradication activities in each country, rather than improving the routine immunization programmes. For example, the funds could have been used to introduce “new” vaccines such, as that for hepatitis B, or to provide more social mobilization activities for routine immunization. On the other hand, without high-level advocacy, it is possible that these other activities could not have attracted the additional funding that the high-profile PEI did and they would not have had sufficient finance.

Limitations of the study

One limitation of the study was that the three study countries were not representative of countries with lower immunization coverage rates. It is possible that the impact of the PEI on financing for routine immunizations would be more adverse in countries with weaker immunization programmes and low coverage. Also, we did not determine whether the policy and financing decisions of international agencies were made at headquarter or regional levels, since we investigated funding only at the country level. Finally, this study examined the impact of the PEI on funding for routine immunization and we cannot draw conclusions regarding its impact on the financing of other health services in the countries studied. ■

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Conflicts of interest: none declared.

Résumé

Impact de l'initiative pour l'éradication de la poliomyélite sur le financement de la vaccination de routine : études de cas au Bangladesh, en Côte d'Ivoire et au Maroc

Pour déterminer si l'initiative pour l'éradication de la poliomyélite a eu un impact sur le financement des programmes de vaccination de routine, nous avons comparé les sources et l'utilisation des fonds destinés aux programmes de vaccination de routine et les activités de cette initiative au Bangladesh, en Côte d'Ivoire et au Maroc pendant les années 1993 à 1998. Nous avons également examiné les tendances du financement pour cette même période dans ces pays et évalué l'effet de l'initiative sur la disponibilité de certaines ressources au sein des programmes nationaux de vaccination, comme l'équipement de la chaîne du froid et le temps consacré par

le personnel à des activités en relation avec la surveillance de la poliomyélite et de la paralysie flasque aiguë. Nous avons trouvé que les trois gouvernements et la plupart des donateurs et des organismes internationaux ont continué à financer les programmes de vaccination de routine au même niveau qu'avant l'initiative. L'analyse des tendances a également montré que le financement de la vaccination de routine dans chaque pays a continué à augmenter après le lancement de l'initiative. Les résultats montrent que l'initiative pour l'éradication de la poliomyélite n'a pas réduit le financement des vaccinations de routine dans ces pays.

Resumen

Repercusión de la Iniciativa de Erradicación de la Poliomiélitis en la financiación de la inmunización sistemática: estudios de casos en Bangladesh, Côte d'Ivoire y Marruecos

A fin de determinar si la Iniciativa de Erradicación de la Poliomiélitis (IEP) afectaba a la financiación de los programas de inmunización sistemática, comparamos la procedencia y el uso de los fondos destinados a dichos programas y a las actividades de la IEP en Bangladesh, Côte d'Ivoire y Marruecos durante los años 1993–1998. También examinamos las tendencias de la financiación a lo largo del citado periodo en esos países y evaluamos el efecto de la iniciativa en cuanto a la disponibilidad de recursos específicos en los programas nacionales de inmunización, como el equipo de las cadenas de frío y el tiempo dedicado por el personal

a actividades relacionadas con la vigilancia de la poliomiélitis y la parálisis flácida aguda. Observamos que los tres gobiernos y la mayoría de los donantes y las organizaciones internacionales siguieron financiando los programas de inmunización sistemática en medida parecida a como lo habían hecho antes de la IEP. El análisis de tendencias mostró además que la financiación de la inmunización sistemática en cada uno de los países siguió aumentando tras la introducción de la IEP. Los resultados muestran que ésta no mermó los fondos dedicados a la inmunización sistemática en esos países.

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