

The costs of public primary health care services in rural Indonesia

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Described are the results of a cost study of national rural health services carried out in Indonesia between November 1986 and March 1987. Detailed costings of government inputs to all public health services below the district hospital level were made for 41 subdistricts in five provinces that were representative of the different regions of the country. The total costs of services as well as the average costs for specific service functions were estimated for the whole country as well as for the different provinces.

The results indicate a low overall level of government spending on rural primary health care. Regional differences in this respect were not significant, suggesting that the government policy of encouraging regional balance in allocations has been successful. The average costs for most services were much greater than the charges made to patients, and this provided information on the current level of government subsidies. There was a large variability in the average costs, indicating that the existing system is inefficient, that some districts were able to attain much higher levels of efficiency than others within the existing constraints, and that improvements in this respect are possible.

Introduction

Although in most developing countries there is little information available about the costs of public health services, such data are useful, especially in times of increasing concern about health care financing (1).

Cost data are needed for health planning and budgeting purposes, where information on the total and unit cost of services can be used to assess the financial requirements of programme maintenance or expansion. Also, several important policy questions require cost data for proper analysis. For example, fees for services should be set with some reference to costs, both average and marginal (2, 3). Usually, the actual allocation of health resources geographically, socially, and programmatically is difficult to obtain from published budgets and expenditures. Direct costing of services can, however, provide detailed estimates of allocations for comparison with programme and planning priorities. Cost data can also be used to measure service efficiency or productivity and hence to support efforts to improve the management of health services (4).

In view of the above-mentioned applications, the lack of adequate data on service costs is notable. Information on the costs of health services in less developed countries has been extensively reviewed by Robertson (5), and only one large-scale study has appeared (6). Comparisons within specific countries suggest that costs vary for similar facilities. Small studies of a few facilities are likely to give misleading or unrepresentative results, and larger samples are therefore required to provide representative data on cost levels and variations for policy-making and planning purposes.

Here, we describe the results obtained in the Indonesia Rural Health Services Cost Study. It was designed to provide a large enough sample of cost data on Indonesia's rural health services to obtain national and regional estimates of the total, per capita, and unit costs of the major public health programmes.

Information on the costs of health services in five provinces in different parts of Indonesia are reported here in two ways. First, weighted means and ranges of total, per capita, and unit (per output) costs of public health care for subdistricts are presented for the whole study sample; costs are also shown for major service programmes. Second, province-specific average costs are shown for the five provinces studied, and these provide some insight into regional variability.

Materials and methods

In the cost analysis study of health centres, data were collected on expenditures and revenue from a total of

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Table 1: Location and number of subdistricts in the study of primary health care services in rural Indonesia

Development region	Province	No. of subdistricts	Weight	Weighted number of subdistricts	% of weighted total
I	East Java	8	9.6	76.8	46.3
	West Java	6	6.8	40.8	24.6
II	South Sulawesi	9	2.9	26.1	15.8
	West Sumatra	10	1.4	14	8.5
III	Nusu Tenggara Barat	8	1	8	4.8
Total		41	—	165.7	100.0

173 facilities in 42 health centre work areas.^a These areas make up 42 subdistricts in the following provinces: East Java, West Java, Nusu Tenggara Barat (NTB), South Sulawesi, and West Sumatra. Data from one subdistrict were not included in the sample because they were of poor quality, and thus the study sample comprised 41 subdistricts and 168 health facilities. The data were collected between November 1986 and March 1987.

The sample included provinces from the three development regions identified by the government of Indonesia. Within each province, regencies^b were selected from mountainous, hilly, and coastal plain areas to reflect a range of physical environments and distances from major population centres. The location of the study sites and the number of areas in each are shown in Table 1. The data were collected by a team drawn from the Faculty of Public Health, University of Indonesia, the Department of Health, Jakarta, local faculties of public health, and The Johns Hopkins University.

Costs were taken to be the estimated expenditure by government on rural (subdistrict) health services for 1 month. The time and travel costs of the users were not estimated. Data limitations precluded inclusion of the prorated cost of the education of health personnel, while the costs associated with government administration at the regency, provincial, and national levels were also omitted. Furthermore, revenue collected at rural health facilities was not deducted from the cost estimates to give net values.

Rural health services at the subdistrict level and below include health centres, subcentres and health

posts, mobile units, and community-based outreach activities. For the last-mentioned, we did not estimate the opportunity cost of volunteers' time in health programmes. Rural hospital services are located in regency towns and were also not included in the study.

The following data were obtained from rural health personnel, health facility records, the subdistrict statistics office and from regency and central government.

- Physical, demographic, and socioeconomic information on each subdistrict.
- Health service resources, including the number of facilities, number and type of personnel, number of active volunteer community workers (*kaders*), and amounts of drugs, supplies, equipment and vehicles, etc.
- Monthly output from health services over a year, including outpatient contacts for curative care, maternal and child health, and family planning services; the number and type of immunizations; and the number and type of community-based activities.
- Costs of health care inputs, including payments to personnel, as well as drug and capital costs.
- Fees charged per patient and the total revenue from such fees over a 1-month period.
- Allocation of personnel time to specific service programmes. This was collected through a self-reported daily log-book of activities that was completed by all personnel every day over two non-consecutive weeks.
- The number and type of personnel who examined each patient for a sample of 100 patients over a 1-week period.
- Patient characteristics, diagnoses, and drugs provided for a sample of curative care and maternal and child health patients in each subdistrict.

The following components were used to estimate the total cost and the unit cost of services:

—investment capital costs (prorated to a monthly

^a The work area of a health centre in Indonesia is a subdistrict (*kecamatan*). The population of these areas ranged from 17 000 to 111 000.

^b A regency (*kabupaten*) is the administrative unit at the level immediately above the subdistrict, and in the study area comprised populations that ranged from several hundred thousand to over 1 million.

- basis) such as buildings, equipment, and vehicles;
- recurrent semivariable costs such as salaries and honoraria, supervision costs, and special programme costs (mainly the direct costs of large physical inputs such as village water supplies, latrines, etc.); and
- recurrent variable costs, including operating and maintenance expenditures and those on drugs and supplies.

Costs were estimated using an appropriate accounting method.^c The total subdistrict costs were obtained by summing all the relevant costs of services for 1 month. Per capita costs are the total costs for each subdistrict divided by its estimated population in 1986.

The costs associated with specific health programmes or functions (7) were estimated by allocating all relevant resources to one of the following programme categories for which clear measures of service output were available: curative care, maternal and child health, family planning, and immunization. All other costs were placed in the category "other". Curative care included all treatment activities—mainly of outpatients—in the clinics, while maternal and child health encompassed antenatal care, deliveries, well-baby and well-child contacts, both in the clinics and the field, as well as community baby-weighing sessions. All individuals contacted for different types of services were counted equally. Family planning included both clinic-based and field activities, but not services provided separately by the National Family Planning Coordinating Board (BKKBN). Finally, under immunization was included all child immunizations, with a contact defined as a single immunization of any kind.

Inputs in multifunction health facilities tend to be used for several different programmes. In the present study, allocation of joint costs was based on two sources of data—reported use for capital goods (buildings, vehicles, and equipment) and the daily activity log-books for the allocation of personnel time. Unit costs were calculated by dividing programme-specific total costs by the recorded monthly output.

It is important to note that the cost accounting method used allocated all costs to some activity category, i.e., nonproductive staff time and resources were assigned to service categories in proportion to the allocation of productive or direct service time. This gave the full cost of public services at the current

level of input productivity and variety of services provided.

Results

National sample

Total costs. The costs from the sample of 41 subdistricts were expressed as the sample mean and lowest and highest values. The subdistricts differed significantly in terms of their size and level of health service inputs and outputs. Individual costs were therefore weighted to reflect the differences in the size of the provinces in which the data were collected, with the weights being based on the proportion of all subdistricts in Indonesia that were accounted for by each province. The number of weighted observations and the resultant percentages for each province are shown in Table 1.

Table 2 shows the estimated monthly costs for all government health services in the 41 subdistricts. If these data are annualized, the average expenditure per subdistrict was Rupiah (Rp.) 46 677 600 (US\$ 28 300) with a range of Rp. 22 994 700 – Rp. 70 686 552 (at the time of the study US\$ 1 = Rp. 1650, approximately). That the total cost for all services varied by a factor of about three is not surprising in view of the differences in the populations and sizes of the subdistricts. However, when the total costs are analysed by programme they show considerably greater variability. This suggests that there are differences in the emphasis given to certain activities in individual subdistricts, even though the total spending in each subdistrict was less variable.

On average, 42.6% of total spending was allocated to curative care and 33% to the subdistrict priority programmes (maternal and child health, family planning, and immunization). Immunization, possibly the most cost-effective intervention in terms of reducing mortality and morbidity, accounted for only 8.2% of spending.

Per capita expenditures. The per capita expenditures on public health services were estimated by dividing the total cost estimates for each subdistrict by its population. The monthly figures obtained are given in Table 3. From these data, the average annual per capita spending on subdistrict health services on a national basis was estimated to be Rp. 1070 (US\$ 0.65) (range, Rp. 576 – Rp. 2684). This is an extremely small amount and reflects the very limited funds available to the rural health system, which none the less has to cope with high mortality and morbidity levels. A recent crude estimate of national spending on health care in the public sector in Indonesia indicated that for 1986–87 this was about Rp. 782 thousand million, which is equivalent to

^c Department of Health, Government of Indonesia, University of Indonesia, Johns Hopkins University. *Cost accounting and allocation methods. Indonesia Rural Health Services Cost Study, report number 1.* Unpublished document, 1987.

Table 2: Total monthly costs of government health service programmes in the 41 subdistricts in five provinces of Indonesia

Programme	Weighted average cost (Rp.)	% of total	Range (Rp.)	
			Lowest	Highest
All	3 889 800 (2357)*	100.0	1 916 225	5 890 546
Curative care	1 657 900 (1005)	42.6	804 951	3 223 940
Maternal and child health	384 500 (233)	9.9	42 342	1 039 346
Family planning	581 600 (352)	14.9	55 955	2 465 943
Immunization	317 600 (192)	8.2	28 448	872 904
Other	948 200 (575)	24.4	217 725	1 767 134

* Figures in parentheses are US\$; US\$ 1.00 = Rp. 1650.

about Rp. 4588 (US\$ 2.78) per capita (8). Comparison of the per capita expenditures on health at the subdistrict and national levels therefore suggests that approximately 23% of public sector health resources are accounted for by rural primary health care. This proportion is, of course, less than that estimated at the national level for primary health care, since we have not included expenditures on the regency, provincial, and national bureaucracies of the Ministry of Health.

The variability in per capita spending (Table 3) was somewhat higher than that for the total cost per subdistrict, which suggests that the effect of popula-

Table 3: Estimated monthly per capita expenditures on public health services in the 41 study subdistricts

Programme	Weighted average expenditure (Rp.)	Range (Rp.)	
		Lowest	Highest
All	89.2 (0.054)*	47.8	223.7
Curative care	38.5 (0.023)	20.7	78.7
Maternal and child health	8.51 (0.005)	0.85	24.3
Family planning	15.49 (0.009)	1.1	104.3
Immunization	7.0 (0.004)	1.4	18.5
Other	19.9 (0.012)	5.7	34.6

* Figures in parentheses are US\$; US\$ 1.00 = Rp. 1650.

tion does not account for all the differences in costs. Table 3 also shows the breakdown of monthly per capita spending by programme and its range.

Unit costs. The mean unit costs from the 41 subdistricts for four major programmes are shown in Table 4. Official user fees for services provided by programmes such as curative care were Rp. 150–300, which is about 20% of the average cost per contact (Rp. 1087); however, unofficial charges have been reported to be much higher (9). While the charges for other services varied, immunization, family planning, and maternal and child health services were often provided free or for considerably less than curative care. The weighted average unit costs found are rather high and reflect the low proportion of costs

Table 4: Unit costs of the main health service programmes in the 41 study subdistricts

Programme	Weighted average cost (Rp.)	Range (Rp.)	
		Lowest	Highest
Curative care	1087 (0.66)*	611	2495
Maternal and child health	526 (0.32)	61	7374
Family planning	1337 (0.81)	266	6796
Immunization	647 (0.39)	165	3666

* Figures in parentheses are US\$; US\$ 1.00 = Rp. 1650.

now paid by users of the rural health system in Indonesia.

In addition to unit costs, Table 4 shows the range of unit costs in the study subdistricts. The smallest percentage range (approximately 400%) was for curative care; for other services the range was much greater, which confirms the large variation in cost-efficiency reported in previous studies (10, 11).

The composition of total costs. In order to understand which types of inputs are the most important for individual programmes and for the overall primary health care services, the total costs shown in Table 2 can be broken down into components. Table 5 shows a comparison of the items that make up the total cost of the different service programmes. On average, staff, drugs and supplies accounted for the greatest proportion of total costs (approximately 81%) if all programmes are combined. However, if the cost components are analysed separately, the contribution of drugs and supplies alone ranged from 43.3% of the total costs for curative care to 8.3% of those for "other programmes", mainly field extension activities. The 18.1% contribution that drugs and supplies made to the cost of maternal and child health services reflects the routine use of only low-cost diet supplements in this programme. Overall, capital costs ranged from 9% to 17% and operating and maintenance costs from 3% to 6%, while supervision costs were negligible (<0.8%).

Output and unit costs. Previous studies have indicated that there is a strong relationship between the quantity of service output and the level of unit costs. As expected, health facilities that have higher overall levels of use have lower costs per output. The clearest examples of this relationship for the data from the

present study are shown in Fig. 1 and Fig. 2 for curative care and immunization, respectively. Similar plots for maternal and child health and family planning were less marked, with more bunching at lower levels of output.

At the national level, these curves illustrate the wide variation in productivity of service resources for curative care and immunization programmes. Even with the existing administrative and managerial structure, there therefore appears to be ample scope for improving the efficiency of the services.

Fig. 1 and Fig. 2 also show ordinary least squares (OLS) regressions of the unit costs on output and output-squared. These regressions and the estimated regression coefficients are statistically significant. The estimates suggest that unit costs decline over almost the entire range of current utilization levels, i.e., there is probably considerable scope for increasing the efficiency of health service delivery, even within the existing institutional and management structure.

The factors that determine cost-efficiency are more complex than can be described by a simple relationship with utilization. For example, manpower management (whether staff are a fixed or variable cost), case mix, the level of capital investment in health centres and subcentres, and even seniority of staff and their salary levels can affect unit costs. A more thorough analysis of the determinants of unit cost is currently being developed to determine the influence of these different factors on cost-efficiency.

Provincial sample

Here are discussed some of the interprovincial and interregional variability in health service costs for the five study provinces. The data used are unweighted

Table 5: Average percentage distribution of total costs by components for health service programmes in the 41 study subdistricts

Component	Programme*					
	All	CC	MCH	FP	IMM	Other
Capital	13.8	10.6	15.5	9	16.8	16.4
Staff	49.0	41.2	59.5	42.6	49.8	67.2
Drugs and supplies	32.3	43.3	18.1	42.1	25.1	8.3
Supervision, operating, and maintenance	2.7	3.3	4.5	4.8	5.5	3.0
Other	2.2	1.6	2.4	1.5	2.8	5.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

* CC = curative care; MCH = maternal and child health; FP = family planning; and IMM = immunization.

Fig. 1. Plot of unit cost against service output for curative care services in the 41 study subdistricts, Indonesia. The regression line is given by: $\text{unit cost} = 2217.9 - 0.922(\text{output}) + 0.00013(\text{output})^2$; $F = 31.9$, $P < 0.000$, and $R^2 = 0.627$. For the coefficients of the (output) and (output)² terms, $P < 0.01$. Output is expressed as the number of curative care contacts.

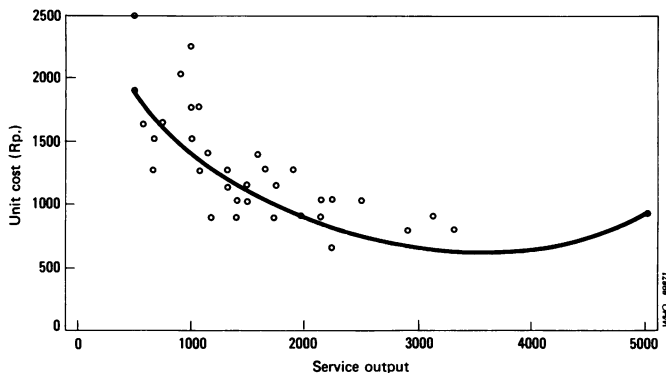
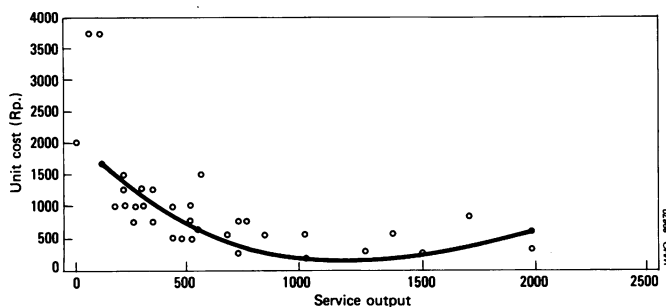


Fig. 2. Plot of unit cost against service output for immunization services in the 41 study subdistricts, Indonesia. The regression line is given by: $\text{unit cost} = 1904.5 - 3.058(\text{output}) + 0.00124(\text{output})^2$; $F = 15.4$, $P < 0.000$ and $R^2 = 0.448$. For the coefficients of the (output) and (output)² terms, $P < 0.01$. Output is expressed as the number of immunizations (injections).



and are given mainly in terms of the average subdistrict values for each province.

Different regions of Indonesia exhibit large variability in terms of population density and development of infrastructure. The island of Java accounts for approximately two-thirds of the country's population, but less than 10% of its land area. Also, the infrastructure is generally better developed on Java. It is government policy to promote inter-regional equity to redress these differences.

Total costs. Table 6 shows the average total monthly costs for all the programmes, together with the programme-specific total costs, for the five study provinces. Both the overall costs and those for most of the specific programmes were higher for the two Java provinces than for the three "outer island"

provinces. This is as expected, since the population in the Java subdistricts is generally much higher than that of the outer islands. The costs of maternal and child health in West Sumatra and immunization in Nusa Tenggara Barat are, however, exceptions to this trend and represent the highest allocations for these programme categories. This suggests there is scope for provincial initiatives to emphasize certain programmes. The range of total spending within provinces is narrower than that found in the national sample, indicating that the variation is due to real differences in resource levels between areas.

Per capita expenditures. Total costs were used to calculate per capita expenditures in order to correct for differences in the populations of subdistricts. While some provinces had higher per capita spending

Table 6: Average monthly total costs of public health service programmes in the five study provinces

Province	Programme cost (Rp.) ^a					
	All	CC	MCH	FP	IMM	Other
East Java	4 278 772 <i>2593^b</i>	1 749 323 (41) ^c	425 820 (10)	661 860 (15)	345 426 (8)	1 096 342 (26)
West Java	3 841 437 <i>2328</i>	1 599 302 (42)	313 667 (8)	600 661 (16)	318 793 (8)	1 009 014 (26)
Nusu Tenggara Barat	3 269 850 <i>1982</i>	1 789 591 (55)	242 129 (7)	332 989 (10)	382 989 (12)	522 151 (16)
South Sulawesi	3 209 173 <i>1945</i>	1 546 630 (48)	395 805 (12)	394 973 (12)	249 557 (8)	622 206 (19)
West Sumatra	3 309 210 <i>2006</i>	1 452 114 (44)	524 155 (16)	502 122 (15)	214 602 (6)	616 217 (19)

^a CC = curative care; MCH = maternal and child health; FP = family planning; and IMM = immunization.

^b Figures in italics are US\$; US\$ 1.00 = Rp. 1650.

^c Figures in parentheses are percentages.

than others, there was no clear difference between Java and the other provinces in this respect. This suggests that the government initiatives to create a more equitable geographical distribution of resources across regions are being met.

Unit costs. Table 7 shows the average unit costs for health services in the subdistricts of each province. With the exception of curative care, the estimates for the provinces in Java are substantially lower than those for the outer island provinces. This suggests that service outputs are provided more efficiently in Java, reflecting its greater population density and better transport and, hence, higher usage rates.

The mean unit costs for curative care services were similar in three of the five provinces, which is consistent with the conditions under which such services operate.

The costs of curative services exhibited the smallest variability across subdistricts in individual provinces. In contrast, the variability in the cost of immunization, family planning, and maternal and child health was high in most cases, but lower in Java than in the outer island areas. The high variability in unit costs within provinces indicates that differences in efficiency are not simply regional variations and that there is considerable potential for productivity improvements, even within the different regions.

In some provinces, the unit costs for specific services approached the level of fees charged to patients. This suggests that in some regions cost recovery may be a successful approach to recouping the bulk of real service costs, while in other areas substantial subsidies may exist. However, across-the-

Table 7: Average unit costs of public health service programmes in the five study provinces

Province	Programme cost (Rp.) ^a			
	CC	MCH	FP	IMM
East Java	1015 (0.62) ^b	386 (0.23)	1146 (0.69)	647 (0.39)
West Java	929 (0.56)	355 (0.22)	1271 (0.77)	455 (0.28)
Nusa Tenggara Barat	920 (0.56)	1435 (0.87)	1512 (0.92)	1114 (0.54)
South Sulawesi	1687 (1.02)	682 (0.41)	1459 (0.88)	884 (0.54)
West Sumatra	1217 (0.74)	1351 (0.82)	2591 (1.57)	753 (0.46)

^a CC = curative care; MCH = maternal and child health; FP = family planning; and IMM = immunization.

^b Figures in parentheses are US\$; US\$ 1.00 = Rp. 1650.

board increases in charges could lead to patients in some areas paying more than the cost of services. Decisions about pricing that are based on cost levels, subsidies, or cross-subsidies should be arrived at after careful analysis by service programme and by region.^d

^d Cross-subsidies occur when charges exceeding costs are levied for one type of service, with the surplus being used to support charges below costs for another type of service.

Cost composition. The relative proportions of different cost components by province show that capital costs made up a larger percentage of programme spending in the three outer island provinces, reflecting the smaller complements of staff and other inputs provided in the smaller subdistricts there. For curative care and maternal and child health services (the main clinic-based activities) salaries made up a larger proportion of total costs in the outer islands; conversely, drugs and supplies for these two services comprised a larger proportion of total costs on Java. Such variable costs might be expected to be more important in areas with lower unit costs and higher manpower productivity; however, for immunization services, we found no systematic difference in the relative magnitude of cost components in the study provinces.

Discussion

The results of the study show the feasibility of using large-scale studies of the type described to obtain data that are relevant for health policy, planning, and management in countries with great regional diversity. The following points, however, merit emphasis.

- While it is widely known that overall government health spending is low in absolute terms in Indonesia, the study allowed estimates to be made of the amount spent on rural primary care services—once the administrative costs are removed. The proportion of government health spending on rural primary health care is surprisingly low (23%) as is the absolute level of spending (US\$ 0.65 per capita per year). At this level one can only expect modest results from primary health care.
- The current allocation of health spending to service programmes is clearly not in keeping with priorities for primary health care. Spending on maternal and child health and immunization, which are high priority programmes, accounts for less than 20% of the already small resources for rural health services. Official staff assignments and the actual use of staff both need to be reviewed to determine how to accelerate the shift of resources to priority programmes.
- The data obtained confirm the results of previous smaller-scale studies that there is great potential in Indonesia for increasing cost-efficiency within the existing administrative and management structure. Some subdistricts are considerably more efficient than others, and the total output of the rural public health system could be dramatically increased with relatively small additional costs. Potential areas where improvements could be made include use of drugs and supplies, work assignments of personnel, and the mix of larger and smaller facilities and mobile services.

- The development of appropriate methods for cost analysis and their use in a large-scale study suggest that there is potential for the routine monitoring of costs and allocated resources to provide management with information. Monitoring and efficiency could be linked to incentives for increasing the allocation of resources to successful health centres and even to rewards for successful managers.
- Data on costs are an important element when considering prices or user charges. Also, across-the-board applications of *ad hoc* revisions to fee levels can lead to inequities between regions as well as between users of different types of services. Data from this study are currently being used to evaluate the feasibility and equity implications of changes in user charges for primary health care.

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Résumé

Coût des services publics de soins de santé primaires dans les régions rurales d'Indonésie

Le présent article rend compte des résultats d'une étude menée entre novembre 1986 et mars 1987 dans les régions rurales d'Indonésie sur le coût des services nationaux de santé. On a procédé à une analyse détaillée des dépenses gouvernementales consacrées aux services publics de santé

aux niveaux inférieurs à celui de l'hôpital de district dans 41 subdivisions de cinq provinces représentatives des différentes régions du pays. Le coût total des services, ainsi que le coût moyen de certains d'entre eux ont été estimés pour l'ensemble du pays et pour les différentes provinces.

Les résultats montrent que le niveau global des dépenses gouvernementales consacrées aux soins de santé primaires en milieu rural est peu élevé. A cet égard, les différences interrégionales ne sont pas significatives, ce qui tend à montrer que la politique gouvernementale visant à répartir les fonds de façon équitable entre les diverses régions a atteint son but. Pour la plupart des services, le coût est bien supérieur à la participation demandée aux patients, ce qui donne des indications sur le niveau actuel des subsides gouvernementaux. L'importante variabilité des coûts moyens montre que le système actuel manque d'efficacité, que certains districts obtiennent de bien meilleurs résultats que d'autres malgré les contraintes existantes, et que des améliorations dans ce domaine sont donc possibles.

Les principales conclusions de l'étude peuvent être résumées comme suit:

- Globalement, les dépenses du secteur public dans les zones rurales en matière de soins de santé primaires sont faibles, puisqu'elles s'établissent en moyenne à 1070 roupies (US \$0,65) par personne et par an. Cela représente approximativement 23% du budget total de l'Etat consacré à la santé.
- Le gouvernement a dépensé en moyenne environ 46,7 millions de roupies (US \$28 300) par an pour les services de santé dans chaque subdivision (de 23 à 70 millions de roupies selon la subdivision).
- En moyenne, 42,6% de ces sommes ont été consacrées aux soins curatifs. Le programme de vaccination, considéré comme hautement prioritaire, a reçu environ 8,2% alors que les services de santé maternelle et infantile et de planification familiale assurés par le National Family Coordinating Board (BKKBN) se sont vu attribuer respectivement 9,9% et 14,4% du total.
- On constate une variabilité importante d'une circonscription à l'autre tant en ce qui concerne les dépenses totales que les dépenses par tête.
- Le coût unitaire moyen des services dans les domaines des soins curatifs, de la santé maternelle et infantile, de la planification familiale et de la vaccination est élevé (Rp. 526 ou davantage). En outre, il présente une grande variabilité, surtout pour les services autres que les soins curatifs.
- Les postes Personnel et Fournitures représen-

tent environ 80% du budget total et cette proportion est relativement constante pour les différents services. L'importance relative du coût des fournitures est maximale pour les soins curatifs et minimale pour la santé maternelle et infantile.

● La productivité des services présente une corrélation négative avec les coûts unitaires, ce qui souligne à la fois le large éventail des coûts unitaires et la possibilité d'améliorations importantes de la productivité.

● Les dépenses globales du secteur public en matière de soins de santé primaires sont plus élevées dans les circonscriptions de Java que dans les autres provinces. Les dépenses par tête n'étaient pas systématiquement plus élevées à Java.

● Les coûts unitaires sont en général plus faibles à Java pour tous les services, ce qui pourrait justifier une augmentation des dépenses à Java si l'on considérait uniquement l'aspect coût/efficacité. Toutefois, il faut peut-être accepter une certaine inefficacité si l'on veut établir une plus grande équité entre les régions.

● Le coût unitaire inférieur des services de santé à Java peut s'expliquer par la plus grande proportion des dépenses renouvelables (médicaments, etc.) dans cette province par rapport aux autres régions du pays où les dépenses d'investissement et de personnel ont tendance à occuper une plus grande place.

● Dans certaines régions et pour certains services, les coûts unitaires se rapprochent du prix demandé aux usagers, alors que dans d'autres, les usagers ne paient qu'une petite fraction du coût unitaire. Toutefois, une importante augmentation des tarifs pourrait amener certaines régions à payer plus que le coût réel des services. La politique tarifaire doit donc être établie en tenant compte des différences existant entre les services et les régions.

Ces résultats montrent qu'il est possible d'entreprendre des études à grande échelle dans des pays où les services de santé présentent des différences considérables d'une région à l'autre, en vue de recueillir des données intéressantes pour l'établissement des politiques, la planification et la gestion de ces services.

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