The decentralization of the health system in Colombia and Brazil and its impact on leprosy control

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Summary Decentralization policies are an integrated component of health sector reform in an increasing number of countries. The ability of such policies to improve the health system’s quality and efficiency is backed up by limited scientific evidence. This study intends to evaluate the impact of decentralization on a specialized field of disease control (leprosy control) in Colombia and Brazil. It analyses the respective juridical base, epidemiological indicators and local publications. Furthermore, 39 semi-structured interviews with key informants were conducted. In both countries, the devolution of technical responsibility and financial resources to the municipalities was the implemented form of decentralization. Access to preventive and curative health care and the community participation in decision-making improved clearly only in Brazil. The decentralization to private providers in Colombia had dubious effects on service quality in general and still more on public health. The flow of finances (including finance collection through state-owned taxes instead of insurance companies) seemed to be better controlled in Brazil. Leprosy control in Brazil took advantage of the decentralization process; in Colombia, it came close to a collapse.

Introduction

Since the 1980s, more and more countries are embarking on reforms of their health system. Considerable deficiencies in the quality of available health services and the lack of additional financial resources led to the question: how can the services be improved without increasing the society’s financial contribution to health? Certain modifications and reforms of the health system were strongly suggested by various international organizations, among them the world’s most important financial institutions.1,2 One of the principal modifications proposed within the reform ‘package’ is the decentralization of the health system from the centre to the periphery and eventually from the state to other executing organs.
The lack of scientific background for such reforms was frequently criticized.\textsuperscript{3} Successful decentralization and improved service quality were seen as inconceivable concepts.\textsuperscript{4} With increasing experience, it was understood that decentralization has various forms and promoters. Whilst the demand to decentralize originated from social development policies at ‘grassroots level’, the concept was later ‘hijacked’ by neoliberalistic health economists in order to promote the privatization of health services.\textsuperscript{5} Partially in answer to that phenomenon, it was attempted to classify the various forms of decentralization.\textsuperscript{5,6} Frequently, the following forms are distinguished:

- Deconcentration (limited transfer of certain responsibilities to peripheral administrative units).
- Devolution (complete transfer of responsibilities to peripheral administrative units including transfer of financial resources).
- Decentralization to mixed local bodies including representatives both of the centre and the periphery.
- Delegation to semi-autonomous agencies without direct participation of the state.
- Federalism—decentralization of responsibilities and resources to an administrative level between centre and periphery.
- Privatization—replacement of state functions by (local) private providers.

The discussion on privatization being a form of decentralization or not is controversial and on-going.\textsuperscript{2,7} The latter authors deny the existence of an ‘efficiency’ criterion detachable from any ideological background.

Already in the 1980s, negative experiences with the decentralization process were accumulated in Colombia and other Latin American countries.\textsuperscript{8} Encountered problems were the transfer of responsibilities and finances into an administrative vacuum without any reasonably prepared staff. Local interest groups could use and abuse these new responsibilities arbitrarily. The equity between the peripheral units, a component of health service quality, was most seriously jeopardized.

A devastating diagnosis\textsuperscript{9} of the decentralization process was made in Mexico. The health system became more fragmented, commercialized and polarized into two classes than ever before. The analysis of the decentralization across Latin America\textsuperscript{10} qualified it as ‘counter-productive’ in most cases.

In Brazil, mixed experiences were reported: Araújo Jr\textsuperscript{11} studied the decentralization process over the 6 years following the declaration of Brazil’s new constitution in 1988. He claimed that neither community participation nor devolution to the municipalities made remarkable progress. He describes the decentralization process as blocked at Federal State level. In certain contrast, Collins \textit{et al.}\textsuperscript{12} saw the decentralization in Brazil threatened by a lack of control through the Federal States, increasing mercantilization of the health sector, and the missing equity between the municipalities. They acknowledged the progress achieved through the National Health Programme Sistema Único de Saúde SUS in reducing social disparities in the periphery.

Other publications\textsuperscript{13,14} reported a positive impact of the Brazilian decentralization process on public health interventions and community participation.

Few studies investigate the impact of decentralization on disease control. Freese de Carvalho \textit{et al.}\textsuperscript{15} studied schistosomiasis control in Pernambuco in the decentralized health system and saw it jeopardized by the missing participation and competence of the
municipalities. Additionally, there were not enough funds available, and schistosomiasis was not recognized as a public health problem.

For similar reasons, the control of lymphatic filariasis in Recife\textsuperscript{16} and of the vector-born diseases malaria, dengue fever and Chagas disease in Brazil\textsuperscript{17} were affected adversely through decentralization.

Kritski and Ruffino-Neto\textsuperscript{18} investigated tuberculosis control in times of decentralization and depicted the temporary collapse of TB drug production and distribution in Brazil caused by lack of adequate planning, absence of political commitment and the neglect of tuberculosis as a public health problem.

No study could be identified which investigates the impact of decentralization on leprosy control. As leprosy continues to be a public health problem in quite a few countries, and as it looks back at a long tradition within the field of disease control, this study intends to fill this gap. The aim is to contribute to the improvement of leprosy control services in times of decentralization in the health sector. The specific objectives of the study are:

- To identify the forms of decentralization implemented and the interests by which the implementation was driven.
- To evaluate the impact of the decentralization process on health service quality in general.
- To evaluate the impact of the decentralization process on leprosy control and to identify the resulting necessary adaptation.

Colombia and Brazil were chosen as settings for the study. Decentralization policies in various forms have been implemented for more than 20 years in Colombia. Since Brazil shifted from military government to a democratic society in 1985, decentralization policies are implemented more and more actively.

Materials and methods

This study utilized four different methodical approaches for the collection of relevant data:

- The Colombian and Brazilian laws and decrees related to decentralization and/or leprosy control were reviewed.
- Epidemiological indicators related to leprosy control were analysed for the time period since the beginning of decentralization. These data are routinely collected at national level in Colombia and Brazil.
- In addition to the literature review, only locally available publications, statements, and newspaper articles debating aspects of decentralization and/or leprosy control were studied.
- As a principal instrument of data collection, 39 semi-structured interviews with key informants were conducted in Colombia and Brazil.

The epidemiological trends were analysed by utilizing data available through both countries’ epidemiological databases. The qualitative data (ballpoint 1, 3, and 4) were collected during two field trips to Colombia in June/July 2000 and to Brazil in March/April 2001. Key informants were basically identified with the help of staff working directly or indirectly for the National and the Federal State Leprosy (and Tuberculosis) Control Programme in both countries. Informed consent was always obtained. The programme staff and the key informants supported the identification of other qualitative data sources such
as relevant decrees and other publications. The semi-structured interviews followed a topic
guide, which was adjusted to local requirements. Most interviews were registered on a
portable tape recorder and transcribed locally. Some people interviewed worked directly in
leprosy control, some in the public and private health sector at all administrative levels, some
for health insurance companies, and some were people affected by leprosy.

The quantitative data (epidemiological indicators) were submitted to a descriptive
statistical analysis. In the absence of significant associations (let alone plausible cause–effect
relationships) between the implemented policies and these indicators, no inferential statistical
analysis was feasible.

The qualitative data were carefully reviewed for common categories and themes.
Minority views and discrepancies were discussed. Common patterns were identified and
debated.

The careful preparation of data collection, immediate and correct transcription, and the
reflection of already conducted interviews during the collection procedure intended to
enhance the validity of the results. Nonetheless, it is acknowledged that the validity of
health systems research depends very much on the expertise of the researcher. Furthermore,
even valid results may be difficult to generalize to other settings.

Strict confidentiality concerning their identity was assured to all interviewees.

Results

JURIDICAL BASE OF HEALTH SYSTEM DECENTRALIZATION

The decentralization process in Colombia is basically regulated by the Law 10 of January
1990, the Law 60 of August 1993, and the Law 100 of 1993. These laws guarantee every
resident’s right of access to health services. The normative role and the political leadership of
the National Ministry of Health are maintained. The key responsibilities in health service
provision are transferred to the municipalities. They have the option to transfer this
responsibility further from their own health services to private providers. The municipalities
have to fulfill certain conditions before becoming ‘decentralized’. The transfer of responsi-
bilities goes hand in hand with financial transfers from the centre. The Law 100 establishes a
System of Social Security including a health insurance system in order to finance the
decentralized health system. Everybody with access to health insurance (more particularly
everybody regularly employed) has to be registered and insured at an Entidad Promotora de
Salud (EPS—Health Promotion Unit) of his choice. He is then entitled to utilize the
health services of any Institución Prestadora de Salud (IPS—Health Provision Institution)
co-operating with that EPS. Vulnerable population groups (like women in pregnancy,
children, the elderly, peasants, disabled people and leprosy patients) should get a subsidized
access to the health services by being registered by an Administradora del Régimen
Subsidiado (ARS—Administrator of the Subsidized Regimen). Everybody else should get
direct access to health services paid by the government. The functioning of this system is
supposed to be supervised by various institutions, among them the Superintendencia
Nacional de Salud (National Health Superintendence).

Apart from this Plan Obligatório de Salud (POS—Compulsory Health Plan), a Plan de
Atención Básica (PAB—Basic Care Plan) deals with public health problems. It is financed
directly by central and local taxes, and is also to be designed and executed by the
municipalities.
In Brazil, the Federal Constitution guarantees the provision of preventive public health services and the access to curative services as a ‘right of all’ to be secured by the government. The Law 8.080 of September 1990 foresees the municipalities as the key actor in health planning and service provision. The communities are supposed to participate in decision-making. Law 8.142 of December 1990 regulates the creation of certain councils at municipal, Federal State and National level in order to foster this participation. The Norma Operacional Básica do Sistema Único de Saúde (NOB-SUS—Basic Operational Norm of the Unique Health System) from 1996 emphasizes the importance of preventive and holistic health care in the light of other social problems. It regulates the financing of the Sistema Único de Saúde (SUS—Unique Health System) through social security which is itself largely financed by taxes. Furthermore, it classifies the Brazilian municipalities into three groups according to their capacity to assume the new responsibilities in the decentralized system. The Portaria (Decree) no. 816/GM from 26 July 2000 assures the position of leprosy control in the decentralized system: Such activities are a *conditio sine qua non* for a municipality in order to become fully decentralized. The Norma Operacional de Assistência à Saúde/SUS (NOAS-SUS—Basic Operational Norm of Health Assistance) modifies the NOB-SUS slightly and explains how a municipality can be disqualified from being a decentralized one. In addition, it promotes and regulates the eventual co-operation between municipalities without necessarily involving the Federal State authorities.

**Epidemiological Data**

The number of registered leprosy cases in Colombia declined sharply from 1990 (9600 patients) to 1999 (1960 patients). Most probably, the main reason for this decline was the shortening of the chemotherapy from a life-long treatment (at least in case of multibacillary leprosy) to a treatment of a couple of years. In the same time period, the number of newly detected cases per annum decreased only slightly from 765 to 646 patients. The mean treatment duration of 3 years in Colombia is still quite high. In most countries it is accepted that leprosy can be treated successfully with 6–12 months of chemotherapy. In any case, Colombia with a rate of newly detected cases of 0-16/10,000 population in 1999 is a low endemic country. There is no evident impact of changes in the health system on these epidemiological indicators. This observation is equally true for some others indicators which are routinely assessed (as proportion of children, multibacillary and disabled patients among the new cases).

The epidemiological situation in Brazil is different. Statistics from the Federal States of Mato Grosso, Mato Grosso do Sul, Amazonas and Maranhão were observed more closely. Though the number of registered cases is also declining in most cases (and most dramatically in Amazonas from 11,227 to 2859 patients in the time period 1990–1999), the number of newly detected cases per year remained quite stable or in the case of Maranhão clearly increased (from 2032 to 4208 patients in the period 1992–1999). The rate of new cases per year varies from 14/10,000 population (Mato Grosso) to 3-5/10,000 patients in Mato Grosso do Sul (11/10,000 in Maranhão and 6/10,000 in Amazonas). With such rates, these are altogether high endemic regions. The stable number of new cases should most probably be attributed to the epidemiological situation itself and to leprosy control programme activities rather than to changes in the health system. The same statement can be made about other readily available indicators as the high proportion of children (21%) among the new patients in Maranhão in 1999.
In conclusion, the observation of the considerable number of epidemiological indicators collected in leprosy control did not provide any significant results concerning the impact of the decentralization process.

DISCUSSION IN LOCAL PUBLICATIONS AND MEDIA

Jaramillo Perez\(^1\) and the General Audit-Office of the Republic\(^2\) (Contraloría General de la República) agree that the reformed Colombian health system succeeded in mobilizing more financial resources for health. The percentage of Colombians covered by health insurance rose to 29%. The main reason was the inclusion of family members into the employee’s health insurance. On the other hand, it is criticized that the lack of control over the financial flows, high administrative costs, and lack of human capacity building for the decentralization process jeopardized the expansion of the subsidized system. It only covers an additional 16% of the Colombian population.

Patíañ Restrepo\(^3\) sees decentralization in Colombia as a paradox. Though it was supposed to improve social disparities, it led to an unprecedented crisis in the health system. Very substantial financial resources disappeared in administrative procedures, a considerable number of public health institutions and hospitals went bankrupt, and medical ethics were replaced by undisguised profit maximization.

With similar arguments, the Colombian Medical Association\(^4\) (Asociación Médica Colombiana) describes the decentralization process as the profit-orientated introduction of the ‘law of the market’ into health service provision. The working conditions of health staff and the quality of available health services were affected adversely. More seriously, due to the lack of vacancies in the subsidized health system (in the ARS), the percentage of people without any reasonable access to health services rose to 47% of the Colombian population.

Pinto\(^5\) investigates the impact of the Colombian decentralization in leprosy control. He finds the stigma attached to leprosy reduced and the financial resources increased. Nevertheless, he sees leprosy control jeopardized by the collapse of contact tracing and active case-finding, the disappearance of trained staff, a resulting high proportion of treatment defaulters, the lack of co-ordination between preventive and curative health services, and a general lack of interest in public health.

Colombian newspapers report regularly on the corrupt diversion of financial resources allocated to health in the country, they characterize the current situation as a ‘total administrative chaos’.

The Brazilian Ministry of Health itself\(^6\) describes the decentralization process in the country as a success. By the beginning of 2000, 520 out of 5500 municipalities were totally decentralized, and 3000 more had assumed partial responsibility for basic care. Three thousand municipalities had teams for ‘family medicine’, to be explained later, and the same number had set up well-functioning municipal councils to ensure the participation of the community in decision-making. The success was possible due to the high acceptance of the decentralization policy by all involved parties, the readiness of the municipalities to assume financial responsibilities, and the rapid expansion of institutions in charge of ‘social control’.

With expenses of R$ 192 per capita in 1998, the SUS executed most of all basic and complex health services in Brazil, and is thus considered to be highly efficient. Twenty-nine percent of the Brazilian population had no regular access to health services, but only a minority among them had no access at all. In another publication,\(^7\) the Programa de Saúde da Família (PSF—Programme of Family Health) is explained: The programme intends to enhance the
interaction between health staff and the target population. Furthermore, it intends to incorporate preventive health services into the general ones. Each PSF team, consisting of a medical doctor, a nurse and various auxiliaries and health agents, is supposed to care for approximately 1000 families in a given geographical area. It is responsible for planning, execution and evaluation of all principle health services and interventions in that area. The programme is financed by taxes, and municipalities must be at least partially decentralized to receive Federal subsidies for their PSF programmes. The programme is expanding rapidly in Brazil and well accepted by the communities. By 2001, 30% of the Brazilian population are supposed to be covered by PSF centres.

Brazilian newspapers report with reserved optimism on the progress of decentralization and the PSF as a part of it. Though cases of corruption are regularly disclosed, the general view on this policy is positive.\(^{26}\)

RESULTS OF THE SEMI-STRUCTURED INTERVIEWS

The key informants in Colombia described the introduction of decentralization policies as being the result of foreign and neoliberalist influences. The objectives of the decentralization process were an increase in health service provision coverage, greater efficiency, the transfer of responsibilities to the periphery, and eventually the progressive privatization of the health sector. The implementation of this policy was depicted as ponderous, if not disastrous: It was hampered by lacking political commitment, the transfer of responsibilities to an ill-prepared periphery, the collapse of public services in general and of leprosy control more specifically, political patronage in conflict with public interest, and the inability of the legislature to react adequately to these problems.

The interviewees admitted that the inclusion of all family members into health insurance and gradually improved community participation were positive aspects of recent health sector reforms. On the other hand, it was criticized heavily that access to the subsidized regimen was hampered by artificial obstacles, an—in some cases literally—deadly bureaucracy, clientelism, and all other forms of corruption. By law, the entire therapy of leprosy is free in Colombia, but this right was described as difficult to claim.

The equity between municipalities was severely affected, as the poorer municipalities were both technically and financially unable to assume any of the new responsibilities. Furthermore, the transfer of finances seemed to be arbitrary in quite a few cases. The administration of the health services (EPS and ARS) consumed up to 50% of the health sector’s financial resources.

The decentralization dismantled the public health services caring for the poor, led to a ruinous competition between private health care providers, and fragmented the medical profession. Nonetheless, there was very little resistance to the new policies, as its destructivity was not anticipated.

The centre, i.e. the Ministry of Health, maintained indeed its normative role, but in the absence of means for the close supervision of the decentralization process as well as in the absence of sanction mechanisms, it had little chance to steer the implementation. The privatization of services and low professional standards in the municipalities provoked a sharp decrease in public health activities. The split between curative POS and preventive PAB proved to be particularly counter-productive.

The sacrifice of service quality to efficiency caused frequent turnover among the underpaid staff. Knowledge related to leprosy and its control fell to extremely low levels,
the field work (e.g. contact tracing) and the information system came close to a collapse. Only the provision of chemotherapy for newly detected patients was not affected. Services aiming at the prevention of disabilities among new and older cases could be sustained through the substantial engagement of a NGO working in that field. There was no consensus among the interviewees about the prospects of the decentralized health system in Colombia. Some of them presumed that with time the—-theoretically well-designed—system will start to function well. Others saw it as a ‘game’ with health, predicted the total collapse of public health services in the Colombian periphery and described the success of decentralization as incompatible with the level of corruption in the country.

In Brazil, the interviewees mentioned external influences as well as the growing public health movement of the young democracy in the 1980s when asked about factors promoting decentralization policies. Health was declared as a basic right. The objectives of the decentralization were an increased coverage of health service provision and an improved community participation in decision-making. As in Colombia, the decentralization process was impeded by the lack of political commitment, the lack of competence and structures in the periphery, and an encrusted political mentality.

It was acknowledged that the decentralization improved leprosy control by a service provision adapted to local needs and increased economical and geographical access. Some interviewees raised the question of whether decentralization to the municipal level, as implemented, is sufficient or if it should advance further to the periphery.

The equity between the municipalities was described as jeopardized by the decentralization, but quite a few compensatory mechanisms were in place. The community participation was definitely seen as improved within the new health system, and the integration of leprosy control activities into the general health services in the neighbourhood was well accepted by both leprosy patients and the community.

The flow of finances in the decentralized system was characterized as more direct than before. Though the misuse of financial resources was reported, the municipalities were made accountable for such failures. Still, a certain level of corruption was seen as a problem in Brazil as well.

Private health service provision was frequently seen as too commercial and thus dubious. Although dependencies from private providers existed in some cases, the public service provision through the SUS enjoyed a generally strong political backing at all administrative levels. There was minimal resistance against the decentralization process; people were too occupied by other problems and obligations.

The centre did not only maintain its normative role, it was controlling and supervising the decentralization process closely. In case of deficiencies, corrective measures including sanctions existed and were applied.

Fostering Primary Health Care is one of the principal objectives of the PSF. In consequence, public health services were promoted by the Brazilian decentralization process. The decentralization helped to democratize the health sector.

As in Colombia, frequent changes of staff threatened the efficacy of training and the knowledge level of health staff in leprosy control and other fields. Notwithstanding, it was reported that the ‘field work’, e.g. contact and defaulter tracing, improved by the integration into general and peripheral services close to the community. The provision and distribution of drugs for the chemotherapy always worked well; services for the prevention of disabilities among actual and former patients could still be improved. The Brazilian health information
system ‘SINAN’ (Sistema de Informação de Agravos de Notificação) is undergoing substantial changes and cannot be assessed at the moment.

Altogether, the decentralization of the health system enjoyed broad, albeit not total, acceptance among the interviewees. Most of them portrayed it as the only way to improve the various aspects of quality in health service provision and thus to contribute to a more humane society.

Discussion

The decentralization of the health system in Colombia and Brazil had quite a few aspects in common: In both countries, the declared intention was to ensure the access to health services and the participation in decision-making of the entire population. Decentralization was planned and implemented as ‘devolution’ to the municipalities with, if necessary, recourse to private service provision. The general population, health staff and local politicians were ill-prepared both psychologically (acceptance of changes) and with regard to the content of the decentralization process. In consequence, the decentralization was hampered by unqualified managerial and technical staff and by the misuse of financial resources. Frequent changes of staff jeopardized efforts to build up human capacity. In both countries, the centre maintained its normative function.

Nonetheless, substantial differences between the Colombian and the Brazilian way of decentralization could be observed: In Colombia, the reform was driven by external neoliberalist forces. In Brazil, the growing public health movement of the young democracy played an important role as well. Whilst Colombia attempts to base health financing on insurance, Brazil intends to cover the health services through taxes. The Colombian health sector reform emphasizes the need to increase the ‘efficiency’ through competition between public and private service providers and through competition among the insurance companies. Brazil promotes the service provision through public providers financed by the SUS. Decentralization always affects the equity as it treats unequal local units (the municipalities in Colombia and Brazil) equally. This effect is accentuated through the way decentralization is implemented in Colombia. In Brazil, it is gradually compensated by the existence of the various degrees of decentralization, by the flexibility of smaller municipalities, and by special support for small and poor municipalities by neighbouring ones and by the centre. The community participation in Brazil is clearly in progress, its progress in Colombia is ambiguous. The flow of finances in Brazil is controlled more strictly; sanctions are applied in contrast to Colombia. Leprosy control in Brazil was stimulated by the decentralization; in Colombia, it came close to a collapse. Finally, the Brazilian interviewees regard the future of decentralization with optimism. In Colombia, doubts prevail.

Conclusions

Firstly, it can be concluded that even quite similar approaches to decentralization in similar settings (the devolution to the municipalities in two larger South American countries) can have quite a distinct impact on health service quality, on public health, and finally on leprosy control. This observation raises the question of the underlying reasons.

Obviously, the control of the financial resources in Brazil by the State is more rigorous at
the various levels: The finances are secured directly by taxes and not indirectly by insurance companies. These resources are usually transferred and utilized by public and not by private health service providers. Finally, the utilization is controlled by public auditing institutions acting *de facto* and not only *de jure* at various administrative levels.

Health systems research does not provide conclusions backed by easily replicable evidence. It only offers plausibility, not certainty. With this limitation in mind, it can secondly be concluded that promotion of private health service provision within the decentralization process has indeed a negative impact on the quality of generally available services, on public health, and on leprosy control in particular.

Thirdly, the political commitment to decentralization itself and to improved health service provision and community participation was more pronounced in Brazil than in Colombia at all administrative levels. Though the same problems were encountered in both countries’ periphery, they were tackled more successfully by the Brazilian Ministry of Health, which remained steadfastly devoted to the success of its reform. It proved to be possible to integrate the beneficiaries—the community—into decision-making. Under such well-defined conditions, public health services and leprosy control can obviously take advantage of decentralization.

The validity of these conclusions is limited by methodical restrictions of the study. It is based on the analysis of epidemiological indicators and the collection of qualitative data clearly limited in space and time. The conclusions might be difficult to generalize as the examples of Colombia and Brazil emphasize the necessity to contemplate carefully the local historical, political and socio-cultural background before interpreting the data. To a certain degree, the results of this study are backed up by parallel research and might thus be generalized.

It is generally accepted that the impact of decentralization depends largely on the local context. A sweeping statement about decentralization cannot be made; each and every decentralization process requires close observation and profound analysis before being evaluated.

It is equally acknowledged that strong political commitment and the participation of all stakeholders including the ‘users’ of health services are necessary prerequisites for successful decentralization.

The disastrous effects of decentralizing mainly to private service providers were observed in other settings.

The positive impact of the Brazilian decentralization process on leprosy control is not backed by previous or parallel research. It is at odds with previous research conducted on disease control in Brazil. Recent adjustments of the Brazilian decentralization process might explain this contradiction at least partially.

**Recommendations**

A few recommendations can be made on basis of this study’s results:

- Decentralization must be well prepared and be supported by all stakeholders: politicians, health staff, and the community.
- The role of the centre in supervision, control and adaptation must be a strong one.
- The flow of finances in a given organizational structure deserves particular attention.
• Preventive and curative services should be combined and executed preferably by the public sector. This observation is particularly true for all aspects of leprosy control.

• Future research might focus on the identification of optimal time-frames for the decentralization process—in the investigated cases, paradoxically it was lengthy and still too hasty. The adequate administrative target level for decentralization could be investigated. The impact of the financing mechanism (insurance, taxes) on the success of decentralization deserves definitely additional attention. Finally, opportunities and the important limitations of involving private health care providers into preventive medicine and particularly in leprosy control could be better explored.

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