

Baseline evaluation study about the decentralized management capacity of the Epidemiological Surveillance

Estudo de linha de base avaliativa sobre capacidade de gestão descentralizada da Vigilância Epidemiológica

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ABSTRACT Quantitative approach study with the aim of building an evaluative baseline of the management capacity of Epidemiological Surveillance in the state of Bahia, Brazil. The primary data were obtained through online questionnaire, and the secondary data through document analysis, being considered three dimensions of analysis: organizational, operational and sustainability of the results. It was concluded that the decentralized management of the Epidemiological Surveillance is unable to sustain the results obtained in relation to the health indicators of the population, being necessary the sharing of the decision-making process and a planning oriented by local priorities.

KEYWORDS Health management. Evaluation. Epidemiological Surveillance.

RESUMO *Estudo de abordagem quantitativa com objetivo de construir uma linha de base avaliativa da capacidade de gestão da Vigilância Epidemiológica do estado da Bahia, Brasil. Os dados primários foram obtidos através de questionário on-line, e os dados secundários através de análise documental, sendo consideradas três dimensões de análise: organizacional, operacional e da sustentabilidade dos resultados. Conclui-se que a gestão descentralizada da Vigilância Epidemiológica no estado da Bahia não é capaz de sustentar os resultados obtidos em relação aos indicadores de saúde da população, sendo necessários o compartilhamento do processo decisório e um planejamento orientado pelas prioridades locais.*

PALAVRAS-CHAVE *Gestão em saúde. Avaliação. Vigilância Epidemiológica.*

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Introduction

The objective of this study was to construct a baseline evaluation of the decentralized management capacity of the Epidemiological Surveillance (ES) of the state of Bahia. In this, it is assumed that decentralization is a process in which each sphere of government, in an articulated manner and with decision-making power, is responsible for conducting health policy, in order to guarantee the integrality of attention and popular participation in the formulation, in the implementation, control and evaluation of public policies¹⁻⁶.

It is understood that, in the decentralization of the ES regarding municipalities, rather than defining it as one of the priorities of government, it is necessary to contemplate the effective transfer of power and resources to the municipal body, which, in turn, must reveal ability to govern. This translates into the capacity to generate and control actions, in order to produce results according to the content of the government project and to maintain the governability of the system^{7,8}.

Adopting the government conception of Matus and Guimarães et al.⁶⁻⁹, in this study, the capacity of the decentralized management of the ES is revealed through the capacity of the actors to mobilize available resources and/or to seek new resources, whether normative, material, relational, information and technical, as well as from the position (power) that these actors occupy to negotiate with others, with the objective of developing actions that implies improving the health indicators of the population and the sustainability of results. Management capacity is revealed through three dimensions: organizational (ability to decide); operational (ability to execute); and sustainability (ability to build and maintain partnerships and alliances).

Methods

This is a cropping of the doctoral thesis entitled 'Evaluation of the Decentralized

Management Capacity of Epidemiological Surveillance in the State of Bahia'⁶. The present article details the methodology used to construct the evaluative baseline and the results achieved. The *loci* of investigation were municipalities of the state of Bahia, in a sample per cluster, being considered as primary clusters the macro-regions and as secondary clusters the municipalities, taking as reference the Regionalization Master Plan¹⁰, which contemplates nine macro-regions. The municipalities were selected for the construction of the evaluative baseline according to the following criteria: municipality reference macro-regional; micro-regional municipality not included in the previous criterion; municipality headquarters of the Regional Health Board (Dires) not included in the previous criteria; municipality with full management of the health system not included in the previous criteria.

Adopting these criteria, the largest number of municipalities, 12, was concentrated in the Eastern Macro-region. As an additional criterion for all clusters to have the same number of municipalities, those excluded from the previous criteria were selected and obtained a percentage equal to or greater than 70% of timely closure in epidemiological investigations, in 2007. For this last criterion, it was necessary to make a draw, as some macro-regions exceeded the necessary number of municipalities to complete the clusters⁶.

On the other hand, even with this additional criterion, in the three macro-regions (North, West and Northeast) the set of 12 municipalities established from the macro-region with the largest number of municipalities selected to compose the cluster were not formed, being, then, included those municipalities whose percentage of timely closing in the epidemiological investigations approached 70%. In this situation, three municipalities were added, one in each cluster, one with a timely closing percentage of 66.7% and two municipalities with 60%. Therefore, the initial sample for the construction of the



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evaluative baseline was in 108 municipalities. For the construction of the evaluative baseline, an online questionnaire was sent to the 108 managers of the municipal ESs, and responses were obtained from 38 of them⁶.

The questionnaire was made available by the institutional website of the Epidemiological Surveillance Board (Divep). Each manager of the ES received a password to access the questionnaire, ensuring, thus, the confidentiality of the information. Attached, it followed the Informed Consent Form (ICF). According to the recommendation of the National Research Council, data collection began only after the approval of the project by the Ethics Committee, under the Opinion n° 350/2009 of the Research Ethics Committee of the State of Bahia (CEP-Sesab), being protected the names of the municipalities.

The indicators plan for the construction of the evaluative baseline contemplated the following variables, according to the analysis dimensions:

ORGANIZATIONAL DIMENSION: A1. competences and abilities of the manager [Does the ES manager have training in the area? Does the ES manager have at least experience of two years in management activities? Does the municipality have mobilization committees? Which are? Does the ES manager participate in meetings with the mobilization committee?]; A2. decision-making process [Does the manager implement the actions in accordance with the guidelines defined in the Municipal Health Plan and in the Municipal Health Agenda? Does the manager observe the goals agreed in the Program of Health Surveillance Actions (PAVS) and in the Pact for Life?]; A3. social control [Are Municipal Health Council (MHC) meetings held monthly? Do the board members participate in the preparation of ES plans and projects?]; A4. formal mechanisms of communication [Are there mechanisms or protocols that define the flow of information? Which ones are they? Is the

protocol known to network professionals?]; A5. managers who report knowing the goals contained in the PAVS and the Pact for Life [Does the ES manager know the goals of the PAVS and the Pact for Life? Is this information shared among health workers, MHC, and other segments of civil society?]; A6. population registered by the Family Health Strategy (FHS) [Does the municipality have 100% of the population registered by the FHS?].

OPERATIONAL DIMENSION: B1. operational resources [Does the municipality have a minimum structure to carry out ES activities?]; B2. management of people [What are the arrangements for hiring people? How many employees of the ES are from the effective staff of the ES?]; B3. systematic mechanisms of continuing education [How many and what were the qualifications that ES workers received during the year?]; B4. technical capacity to develop ES actions [Do ES workers adequately investigate and timely close reported cases? What is the tetra-valent vaccine coverage in children under 1 year?]; B5. monitoring and evaluation of the Notification of Injury Information System (Sinan) [Are the informations generated by Sinan carried out? What is the periodicity of such evaluations?]; B6. decentralization of the ES for Family Health Teams (EqSF) [Do EqSF develop ES actions? How many EqSF develop ES actions? What are the actions that the EqSF develop?].

DIMENSION OF SUSTAINABILITY: C1. building partnerships and alliances [What strategic partnerships and alliances built by the Municipal Health Department (MHS) for the development of ES actions?]; C2. monitoring and evaluation of results [Are there, at least, two epidemiological reports produced each year?]; C3. access to health services [Are there mechanisms for public consultation for the receipt of opinion or denunciation and for citizen response? What are these mechanisms?]; C4. regularity of supply [Have the existing supplies been sufficient for the first three months of

management?]; C5. formulation of plans and projects [Is there any plan and/or project under development, approval or execution?]; C6. revenue applied for health [What is the proportion of own revenue of the municipality applied in health?].

For the analysis of the quantitative indicators, the standardized global index was constructed, which resulted from the combination (arithmetic mean) of standardized scores of index 0 (obtained through secondary data) and index 1 (resulting from the indicators defined for each capacity dimension of the ES management, that is, the operational, organizational and sustainability dimensions).

Index 1 was generated by the proportion of the affirmative answers given by managers to each of the dimensions. Subsequently, the indicators were standardized, in z-score, to be on the same scale as index 0, which was generated by the combination of some municipal health indicators. Thus, for each municipality, a standard score was assigned to the organizational, operational, sustainability and health indicators. Therefore, the standardized index 1 corresponds to the arithmetic mean of the three indicators and the index 0.

The global index was categorized through quartiles, resulting in four categories defined as: very bad, bad, regular and good. This same categorization was also applied to index 0, in order to group the municipalities in the different categories (very bad, bad, regular and good).

It is presented, below, the syntax, developed in the SPSSWin software, for the estimation of the indices, which were constructed based on the secondary data of the

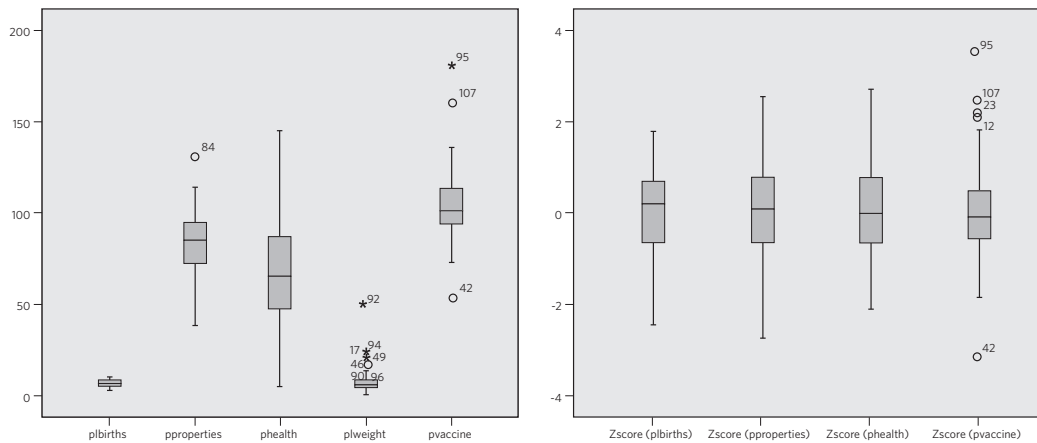
sampled and non-sampled municipalities. Index 0 represents the index generated from the secondary data, and index 1 represents the general index (the combination of index 0 with the indicators of organizational, operational, and sustainability dimensions). Both indices were generated by standardization in z-scores, resulting from the application of the arithmetic mean.

Index0=MEAN (Zpop, Zlbirths, Zproperties, Zphealth, Zplweight, Zpvaccine, Zpcnd, Zptvvaccine, Zprevenue, Zsinan, Zplepros, Zpdcauses, Zpcure_tub).

Index1=MEAN (Zpop, Zlbirths, Zproperties, Zphealth, Zplweight, Zpvaccine, Zpcnd, Zptvvaccine, Zsinan, Zpleprosy, Zpdcauses, Zpcure_tub, ZORGANIZATIONAL, ZOPERATIONAL, ZSUSTAINABILITY).

The figures below represent some variables selected from index 0. In *figure 1*, it is observed the presentation of the Box-plot (cash diagram). This graph allows to compare the median value (dash dividing the rectangular box in the middle) between the indicators studied, in addition to showing the asymmetry that occurs when one of the tails is longer than the other. It is also observed the variability, which is given by the length of the box, that is, the larger the rectangle in length, the greater the dispersion of the data (it is observed that index 0 has greater variability). This allowed us to study and identify the outliers values (discrepant values or atypical data), which are the points beyond the tails. In *figure 1*, there are also the same previous indicators represented by the Box-plot graph, but standardized through transformation into z-score.

Figure 1. Variables of index 0 and standardized variables of index 0



Source: Own elaboration

Comparing the diagrams, it is observed that the magnitude of the proportion of live births has a distribution in the order of tens, which presented flattened in the first diagram. However, with standardization, the effect of the scale of the variables (variables with different scales) is removed, allowing the comparison, without distortion, between the indicators. In addition, standardization reduced data variability, leaving the distribution of indicator data more symmetrical.

The losses in relation to the sample of

municipalities initially established (n=108) were assumed to be random, after evaluating that there were no statistically significant differences between the municipalities that answered the questionnaire, denominated sampled municipalities (n1=38), and the group of municipalities that did not respond (n2=70), called non-sampled municipalities, when comparing the standardized global index, defined on the basis of the secondary data, as well as its components, in individual terms (table 1).

Table 1. Descriptive measures of the items studied for index 0

Group	Items	N	Minimum	Maximum	Average	Standard deviation
Sampled	Number	38	21	73	43,97	18,721
	Pop	38	5711	2.988.058	137.795,82	485.378,724
	Plbirths	35	4,1	10,8	7,337	2,0249
	Pproperties	38	38	114	82,73	16,218
	Phealth	35	5,4	125	64,26	29,2362
	Plweight	32	2,1	23,9	8,212	4,3357
	Pvaccine	35	82,6	181	108,66	20,6085
	Pcnd	37	0	100	67,592	22,8664
	Ptvaccine	35	81,9	163,5	108,24	19,9721

Table 1. (cont.)

Sampled	Prevenue	21	7	27	17,91	4,133
	Sinan	38	0	100	43,16	41,247
	Pleprosy	32	43,8	100	81,156	16,8042
	Pdcauses	38	60,6	100	84,568	10,2118
	Pcure_tub	27	12	100	62,16	31,154
Not samples	Number	70	21	73	47,61	19,084
	Pop	70	6.455	318.904	47.910,47	59.985,681
	Plbirths	67	2,3	10,6	7,051	1,9818
	Pproperties	69	41	131	84,33	18,041
	Phealth	64	7	145,3	68,861	28,4118
	Plweight	60	2,4	50	8,93	7,8619
	Pvaccine	67	54,3	133,9	101,14	14,9354
	Pcnd	70	0	100	73,03	22,5503
	Ptvaccine	67	76,2	136,4	104,673	14,8562
	Prevenue	30	3	24	17,49	4,004
	Sinan	70	0	100	45,99	39,575
	Pleprosy	53	33,3	100	82,611	20,0401
	Pdcauses	69	39,1	100	78,071	16,1118
	Pcure_tub	45	9	100	62,25	31,241

Source: Own elaboration.

Note: P-value \leq 0.05, P-value: descriptive level.

It was verified that there was no statistically significant difference ($p > 0.05$) of the studied variables between the sampled and non-sampled municipalities. In this way, it can be assumed that, possibly, the non-return of all questionnaires did not compromise the selection of municipalities cases.

Results and discussion

Of the 108 online questionnaires sent, a response was obtained from 38 managers of the municipal ES, corresponding to 35.2% of the total sample selected.

Although the initial selection was 12 municipalities per macro-region, the largest number of municipalities sampled was concentrated in the Northeast Macro-region.

Notably in the central-eastern and eastern macro-regions, those with the most populous municipalities, the questionnaires were returned to a lesser extent. However, the state capital, located in the Eastern Macro-region, as well as the second largest municipality in the state, which is part of the Central-East Macro-region, are among the municipalities sampled.

Social disparities in the state are reflected in health indicators. The health problems of the population show the maintenance and/or resurgence of diseases such as dengue, tuberculosis, leprosy, Acquired Immunodeficiency Syndrome (Aids), as well as the emergence of cardiovascular diseases, violence and mental disorders, and elevation of chronic-degenerative diseases¹⁰. It is in this complex and unequal situation

that great challenges are expressed for the strengthening of ES management capacity in the municipalities of Bahia.

In this aspect, as shown in *table 2*, it can be observed that 50% of the municipalities

present management capacity of the ES between very bad and bad, compared to 26.3% of municipalities with a regular management capacity, and 23.7% of municipalities with good management capacity.

Table 2. General evaluation of the management capacity of Epidemiological Surveillance, by macro-region of the state of Bahia, 2010

Macro-region		Index 1 categorized by quartile				Total
		Very bad (-0,53 a -0,2276)	Bad (-0,2277 a -0,059)	Regular (-0,006 a 0,189)	Good (>=+0,19)	
Macro-region 1 (Center-East)	N	1	0	0	1	2
	%	50	0	0	50	100
Macro-region 2 (Center-North)	N	1	1	1	1	4
	%	25	25	25	25	100
Macro-region 3 (Extreme South)	N	1	2	2	0	5
	%	20	40	40	0	100
Macro-region 4 (East)	N	0	0	1	2	3
	%	0	0	33,3	66,7	100
Macro-region 5 (Northeast)	N	2	3	0	1	6
	%	33,3	50	0	16,7	100
Macro-region 6 (North)	N	0	2	1	1	4
	%	0	50	25	25	100
Macro-region 7 (West)	N	2	0	3	0	5
	%	40	0	60	0	100
Macro-region 8 (Southwest)	N	1	0	2	2	5
	%	20	0	40	40	100
Macro-region 9 (South)	N	1	2	0	1	4
	%	25	50	0	25	100
Total	N	9	10	10	9	38
	%	23,7	26,3	26,3	23,7	100

Source: Own elaboration.

By evaluating the data from the macro-regions, separately, taking as a reference the general index (combination of index 0 with indicators of organizational, operational and sustainability dimensions), it is verified that the Eastern Macro-region is in

better situation, having considering that no municipality was included in the quartile between very bad and bad, presenting 33.3% of municipalities in the condition of regular management capacity and 66.7% of municipalities in condition of good management

capacity. In the opposite situation, is the Northeast Macro-region, since the majority of the municipalities obtained an evaluation between very bad (33.3%) and bad (50%). However, this particular aspect should be treated with caution, because its insufficient number of municipalities that can be framed in all situations may have distorted the real situation. This is a problem that presents as a potential limitation in this work, but remains as an experiment and alert so that future studies can take extra measures in order to minimize the sample loss.

This evaluation converges in the same direction of the distribution of services indicated in the State Health Plan, from 2007 to 2010¹¹:

It is noticed an irregular distribution of services in the macro-regions: the East Macro-region, without any doubt, is the one that presents the highest concentration of health services. On the other hand, it is observed that the macro-regions of Central-North, Extreme South, Northeast, North and West are the health regions that present lower.

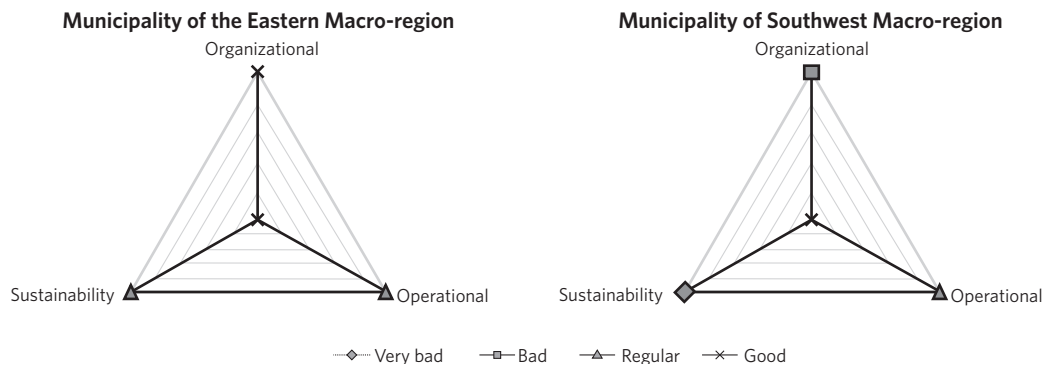
In this way, it can be affirmed that the differentiated degrees of resources and, consequently, of power are configured as elements

that can hinder the management of the ES in the municipalities, as the existing inequalities are not minimized through agreed management processes and shared.

When assessing the attributes by municipality, it is observed that the municipality with the best management capacity is located in the Eastern Macro-region, and the municipality with less favorable conditions is located in the Southwest Macro-region.

As can be observed in *figure 2*, the municipality located in the Eastern Macro-region has a good management condition in the organizational dimension and a regular condition in the operational dimension and in the sustainability dimension. The municipality with a less favorable evaluation obtained a poor evaluation in the organizational dimension, very bad when evaluated the dimension of sustainability, and regular condition in the operational dimension. Although they have a similar population size, with less than 20 thousand inhabitants, the municipalities have a differentiated resource input, such as the Gross Domestic Product (GDP) per capita: the municipality with the best management capacity of the ES has R\$ 9.975,00 and the other, R\$ 3.214,00, three times lower than the other¹².

Figure 2. Epidemiologic Surveillance management capacity of the municipalities selected for the case study. Bahia, 2009



Source: Own elaboration.

In a general evaluation by dimension, it is observed that municipalities have a regular capacity (71%) and a very bad capacity (2.6%) to maintain and mobilize resources that guarantee desirable management conditions, ensuring implementation of ES actions (operational dimension).

Regarding the organizational dimension, 39.5% of the municipalities presented a very poor evaluation, compared to 26.3% that obtained a good evaluation, showing weaknesses in the decision-making autonomy of the local authorities, reinforcing the assertion that the decentralization of the management of the ES assumes a character more normative than political, characterizing, therefore, as a deconcentration of actions and activities.

In the sustainability dimension, it is observed that 50% of the municipalities were evaluated between bad and very bad, and the other 50% evaluated between regular and good. This result allows us to infer that management mechanisms and strategies are still fragile to expand or strengthen partnerships and alliances that favor the sustainability of the decisions and results declared by MHS managers and workers.

Evaluating, separately, the attributes of the operational dimension, with respect to the competence of the manager, 100% have

full superior course, with a predominance of nurses (71%), followed by biologists (10%) and physiotherapists (7.3%). The predominance of nursing in the management of the ES is an expected result, considering that historically, this is the profession that assumes the actions of ES, not only in the management, but also as a member of the FHS^{13,14}.

It is considered, in this study, that a minimum experience of two years and management training are desirable to obtain the technical legitimacy of the manager, as this increases his/her ability to decide. There was a weakness with regard to the manager's competence criteria, highlighting the Extreme South Macro-region, where 80% of managers do not have previous experience in management activities in health services.

There are few municipalities that develop an inter-sectoral articulation, through mobilization committees against dengue, forums of women, maternal mortality committees and infant mortality committees (*chart 1*). However, even though there are committees, some managers say that they do not participate in the meetings, which makes it possible to infer that the establishment of committees alone does not ensure that this articulation is developed, and may constitute a space with attributions.

Chart 1. Indicators related to the organizational, operational and sustainability dimensions of Epidemiological Surveillance in the state of Bahia, 2009

Indicators	Macro-regions								
	Center-East	Center-North	Extreme South	East	Northeast	North	West	Southwest	South
Previously held a position or management function	100%	50%	20%	66,7%	66,7%	75%	60%	60%	50%
Participate in meetings with mobilization committees	0%	50%	0%	100%	50%	25%	0%	0%	25%
Know the guidelines of the MHP	100%	100%	80%	100%	100%	100%	100%	80%	100%
Participated in the preparation of MHP	0%	50%	0%	33%	33%	50%	40%	40%	25%
Affirm consistency between ES actions and MHP guidelines	50%	100%	80%	67%	100%	100%	100%	100%	100%
Affirm consistency between the actions of the ES and the goals of the Municipal Health Agenda	0%	50%	20%	100%	50%	25%	20%	40%	25%

Chart 1. (cont.)

Affirm monthly frequency of MHC meetings	100%	100%	100%	66,7%	100%	100%	100%	100%	75%
Affirm the participation of the directors in the preparation of ES plans and projects	50%	50%	20%	100%	33%	50%	60%	40%	25%
Affirm the existence of protocols defining flows of information between health units and network professionals	0%	25%	80%	100%	66,7%	75%	40%	20%	50%
Know goals of the PAVS	100%	100%	100%	100%	100%	100%	100%	100%	100%
Know goals of the Pact for Life	100%	100%	100%	100%	100%	100%	100%	80%	100%

Operational Dimension

Indicators	Macro-regions								
	Center-East	Center-North	Extreme South	East	Northeast	North	West	Southwest	South
Affirm that the municipality has a minimum structure to carry out the actions of ES	50%	100%	80%	33,3%	50%	75%	100%	100%	75%
Affirm the evaluation of the information generated by Sinan	50%	100%	100%	100%	100%	100%	100%	80%	100%
Affirm that EqSF perform ES actions	100%	100%	100%	100%	100%	100%	80%	100%	100%

Sustainability Dimension

Indicators	Macro-regions								
	Center-East	Center-North	Extreme South	East	Northeast	North	West	Southwest	South
Affirm that the municipality has partnerships and alliances with other institutions	50%	50%	60%	66,7%	50%	25%	80%	40%	75%
Affirm that the MHS elaborated Epidemiological Reports in 2008	100%	75%	70%	100%	60%	66,7%	80%	20%	50%
Affirm the existence of mechanisms for receiving opinions or denunciations, in response to the citizen	0%	25%	50%	100%	66,7%	66,7%	100%	60%	25%
State that the available supplies were sufficient for the first three months of management, in 2009	100%	75%	50%	66,7%	66,7%	75%	100%	80%	75%
Affirm the existence of a plan and/or project in the process of elaboration, approval or execution of the municipal ES	50%	75%	75%	100%	66,7%	100%	100%	60%	25%

Source: Own elaboration.

Decision making in coherence with the MHP, with the Municipal Health Agenda and with the Pact for Life is a desirable requisite for the technical and political legitimacy of the manager. In this respect, only in two macro-regions – South and Southwest – 20% of the managers reported that there was no MHP. Of the municipalities sampled, 94.7% developed MHP; 91.9% of the ES actions

carried out are consistent with the guidelines defined in this instrument (*chart 1*).

The existence and performance of health councils give greater political legitimacy to the organization and indicate the expansion of the capacity to decide. Regarding the participation of the council members in the elaboration of plans and projects, while in the Eastern Macro-region all municipalities

count on this participation, the South (20%) and Extreme South (25%) macro regions showed the lowest percentage in this regard. In the Eastern Macro-region, 66.7% of municipalities hold monthly meetings with MHC members.

As for the employment relationship, only 45% of ES workers have it effective, compared to 55% with temporary work ties. This is a negative aspect of management, as it is an area that requires a body of up-to-date knowledge and practical experience. The high frequency of workers without an effective bond results in discontinuation of the actions of the ES and other health practices (*chart 1*).

Regarding the number of trainings, 67.5% of municipalities carry out two or more trainings per year, the mean being defined as adequate in this study. However, the topics addressed are specific and focused on diseases – notably, communicable diseases – and for immunization, with emphasis on vaccination campaigns.

One cannot deny the importance of these themes. However, they are not enough to stimulate changes in ES practice, especially towards the paradigm of health promotion, and not just disease prevention^{14,15}.

It agrees with Ceccim and Merhy^{15,16} when they affirm that the production of knowledge must happen in the daily life of health organizations, based on the experiences, experiences, and concerns of the involved actors, in a way that promotes transformations in health practices and organization of work.

Regarding the evaluation of the information generated by Sinan, only the central-eastern and south-western macro-regions do not reach a percentage of 100% (*chart 1*). With respect to the frequency of these evaluations, the weekly (44.7%) predominates.

It is understood that, the higher the percentage of FHS developing ES actions, the greater the capacity for local intervention. Note that only the Western Macro-region

does not reach 100%. The practices of the ES in FHS are carried out through compulsory notifications of diseases and injuries, epidemiological investigation and some control measures (collective efforts and vaccination).

In this study, it is assumed that the formation of partnerships and alliances is an important strategy to make the actions of ES effective and directed to the local reality, since integration and articulation with other partners broaden the governability. In this aspect, the West Macro-region (80%) stands out, followed by the East (66.7%). The macro-regions with the lowest performance are North (25%) and Southwest (40%) (*chart 1*). Among the partners mentioned by the managers, the Municipal Secretary of Education stands out, and only two municipalities mentioned a partnership with Dires. Therefore, it is observed that the inter-sectoral and intra-sectoral articulations are still timid, fundamental to ensure the sharing of management, co-responsibility and social participation.

Regarding the dissemination of information, it is assumed that the elaboration and dissemination of epidemiological reports allow the knowledge of the local health situation, which adds value to the management capacity. The Southwest Macro-region has the lowest performance, with 80% of the municipalities sampled without publishing at least two reports per year, a goal agreed between the municipalities and the state.

This data allows a reflection: when the health status of the population is not analyzed, do the actions developed respond to the needs of that municipality? Thus, the information obtained, relevant to directing both the management and the practices of health workers, can be used only to ensure the transfer of financial resources or to obtain work goals, almost always randomly established.

The appropriateness of supplies (notification/inquiry forms, educational material, material for examination collection) is a desirable condition so that there is no interruption in the development of the actions of the ES. In the Extreme South Region, 50% of the managers report the unavailability of supplies in their first three months of management of the ES. Of the municipalities surveyed, in 75.7% there are supplies necessary for the development of actions of the ES.

When evaluating some indicators of health and financial resources, according to the database of the Secretariat of Health of the State of Bahia (Sesab) in 2008, it can be observed: 71% of all municipalities reaching the goal of 95% vaccination in children less than one year, by the tetra-valent vaccine; 50% of the municipalities presenting a percentage greater than 80% of cure among the new leprosy cases diagnosed; only 34% of municipalities infested by *Aedes aegypti* with a proportion of real estate inspected equal to or greater than 90%. As for the percentage of own revenue of municipalities, 17 do not report, 20 municipalities provide a percentage of 15% or more of their revenue – minimum percentage regulated in Constitutional Amendment (CA 29/2000 – and 1 municipality reported a percentage below 10%.

In spite of the growing responsibility of the municipality for the implementation of health policies, it is still contradictory the form of transfer of resources through the financing blocks, insofar as this prevents the decision-making autonomy of municipalities, becoming mere executors of established policies by the federal sphere^{12,17,18}.

It can be inferred that the results of this study are consistent with the conclusions of Matus and Guimarães et al.^{8,9}, when they affirm that government capacity (operational dimension) conditions and is conditioned by the government project (organizational dimension) and by the of the system (sustainability dimension).

Conclusions

The overall results, even with the sample loss of potential questionnaires (64.8%), point towards the studies of Barreto and Guimaraes and Landim when they point out that the decision-making autonomy of municipalities in relation to other spheres of government is still fragile, to the definition of political guidelines^{19,20}. The municipalities also reveal a vulnerable technical autonomy regarding the management of people, translated by the precariousness of the labor relations, the employment bonds and the way in which the processes of permanent education are developed; in the planning processes, which are still not very participative, as well as in the evaluation of actions; in the deficient physical structure, of equipment and of personnel, that makes difficult the accomplishment of the actions; in a management process that reveals a much more administrative rather than strategic nature; in alliances and partnerships built, albeit timidly, but which may indicate progress in management practices.

It is in the operational dimension that the results presented by the municipalities are better, although in a regular evaluation. This fact may be related to the technical capacity and the commitment of the middle managers and workers who develop the actions of ES, since the results of the evaluative baseline reveal that maximum managers of the MHS and mayors do not yet support the services and actions of the ES.

The strategy of submitting online questionnaires allowed the collection of information from several municipalities, in the various macro-regions, enabling the identification of those that reveal better management capacity of ES. However, the fact that the implemented system does not have the characteristic of saving the answers and allowing the manager to continue responding at another time made it difficult to obtain answers from more participants. This failure

should be explained so that it does not repeat itself in new studies. However, even with the initial sample loss, the study revealed that there was no statistically significant difference in the comparison between the standardized global index based on secondary data from the municipalities that answered the questionnaire (n1=38) and those who did not respond (n2=70), indicating that, even if the sample was smaller than expected, the data obtained could be extended to the others, when analyzed globally.

It is considered that the decentralized management of the ES, by itself, is not capable of sustaining the results obtained in relation to the health indicators of the population. In this context, it is necessary to share the decision-making process and the adoption of a planning oriented to local priorities,

including with regard to the allocation of financial and operational resources.

Collaborators

Silvone Santa Bárbara da Silva Santos elaborated the article based on her doctoral thesis. Cristina Maria Meira de Melo, advisor of the thesis, contributed to the conception and was responsible for the final critical review of the article. André Renê Barboni participated in the elaboration of the research methodology and data analysis. Carlos Antonio de Souza Teles Santos participated in the elaboration and validation of the research methodology, and data analysis. Alexandro Gesner Gomes dos Santos contributed to the review of the article. ■

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