The performance of the audit of the Unified Health System in a Brazilian state

A atuação da auditoria do Sistema Único de Saúde em um estado brasileiro

La acción de la auditoría del Sistema Único de Salud de un estado brasileño

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ABSTRACT

Objective: To describe the performance of the Unified Health System audit in a Brazilian state. Methods: Descriptive study, carried out in 2017 and 2018, in the State of Rio Grande do Norte, divided into four stages: mapping of audit systems in the municipalities; elaboration of questionnaires for data collection; sending the questionnaires to the auditors; and analysis of the data present in the questionnaires. The study population corresponded to 66 auditors, yet, the final post-collection sample resulted in 18 participants due to the participant’s refusal. In the data analysis, a simple quantitative description of numbers and percentages was used to characterize the collection regarding the existing auditing systems, and in the responses obtained by the questionnaires, the data was processed through a lexicographical similarity analysis. Results: Of the 167 municipalities (100%) in the state, 95 (57%) said they did not use these services, and in 63 (38%) municipalities, it was not possible to obtain information so that only nine (5%) answered that they had the audit services. The auditors’ understanding about their work process brought the importance, impact, and need for training in the area. Conclusion: The description of the performance of the audit components in the state of RN showed a scenario of concern. The perception of professional auditors about their work process denoted the great importance of the contribution of these services to health.

Descriptors: Medical Audit; Nursing Audit; Unified Health System Quality of Health; Care Health Services Administration.

RESUMO

Objetivo: Descrever a atuação da auditoria do Sistema Único de Saúde em um estado brasileiro. Métodos: Estudo descritivo, realizado nos anos de 2017 e 2018, no estado do Rio Grande do Norte, dividido em quatro etapas: mapeamento dos sistemas de auditoria nos municípios; elaboração de questionários para coleta de dados; envio dos questionários para os auditores; e análise dos dados presentes nos questionários. A população do estudo correspondeu aos 66 auditores, entretanto a amostra final pós-coleta resultou em 18 participantes, dada a recusa de participação. Na análise dos dados utilizou-se uma descrição quantitativa simples de números e porcentagens para caracterização da coleta referente aos sistemas de auditorias existentes e, nas respostas obtidas pelos questionários, realizou-se o tratamento dos dados por meio de análise lexicográfica de similitude. Resultados: Dos 167 (100%) municípios do estado, 95 (57%) municípios afirmaram não usufruir desses serviços e em 63 (38%) municípios não foi possível obter informação, de modo que apenas nove (5%) responderam possuir os serviços de auditoria. A compreensão dos auditores acerca do seu processo de trabalho trouxe a importância, o impacto e a necessidade de formação na área. Conclusão: A descrição da atuação dos componentes de auditoria do estado do RN mostrou um cenário de preocupação. A percepção dos profissionais auditors sobre o seu processo de trabalho denotou a grande importância da contribuição desses serviços para a saúde.

Descritores: Auditoria Médica; Auditoria de Enfermagem; Sistema Único de Saúde; Qualidade da Assistência à Saúde; Gestão de Serviços de Saúde.
RESUMEN

Objetivo: Describir la acción de la auditoría del Sistema Único de Salud de un estado brasileño. Métodos: Estudio descriptivo realizado entre los años 2017 y 2018 en el estado de Río Grande del Norte (RN) que ha sido dividido en cuatro etapas: el mapeo de los sistemas de auditoría de los municipios; la elaboración de cuestionarios para la recogida de datos; el envío de los cuestionarios para los auditores; y el análisis de los datos de los cuestionarios. La población del estudio ha sido de 66 auditores, sin embargo, la muestra final post-recogida de datos ha resultado en 18 participantes debido a recusa de participación. Para el análisis de los datos se utilizó una descripción cuantitativa simple de números y porcentajes para la caracterización de los datos de los sistemas de auditorías existentes y, para las respuestas de los cuestionarios se ha realizado un análisis lexicográfico de similitud. Resultados: De los 167 (100%) municipios del estado, 95 (57%) municipios afirmaron no usar de esos servicios y en 63 (38%) de ellos no ha sido posible tener información de manera que solamente nueve (5%) han contestado tener los servicios de auditoría. El entendimiento de los auditores sobre su proceso de trabajo trajo la importancia, el impacto y la necesidad de formación en el área. Conclusión: La descripción de la acción de los componentes de la auditoría del estado de RN mostró un escenario de preocupación. La percepción de los profesionales auditores sobre su proceso de trabajo presentó la gran importancia de la contribución de esos servicios para la salud.

Descriptores: Auditoría Médica; Auditoría de Enfermería; Sistema Único de Salud; Calidad de la Atención de Salud; Administración de los Servicios de Salud.

INTRODUCTION

The Unified Health System (SUS) was inspired by values such as equality, democracy, and emancipation and is included in the Constitution, in ordinary legislation and technical and administrative norms as a product of the Brazilian Health Reform, being legally based on federal laws n. 8.080, of September 19, 1990, and 8142, of December 28, 1990, and regulated by Decree No. 7,508, of June 28, 2011, which proposed new policies and models for the organization of health systems, services, and practices[1].

The guarantee of universality, instituted by the SUS, represented, in the History of Brazil, the redemption of a social debt and the beginning of the implementation of the health sector reform. The State’s duty was guaranteed for the first time in a Constitution, being represented by the responsibility to organize a single, national, public, and universal health system. But after 30 years, the health system and its advocates face significant challenges[2].

Considering that health is one of the principal sectors in the economy of countries and its management is complex, it is necessary to consider the financial resources that will keep the system functioning regularly and sustainably in the SUS planning process[3]. In this context, it should be noted that the National Audit System (SNA) is the set of bodies and units established in each sphere of government: Union, states, and municipalities, under the supervision of the National Direction of the Unified Health System, with the attribution to carry out the audit on SUS actions and services[4].

In the conception brought by the National Audit System (SNA), the audit as a management qualification instrument aims to strengthen the SUS through recommendations and guidelines to guarantee access and quality of health care offered to citizens. Thus, it is an instrument with great potential for public health service control, which can detect failures, irregularities, and opportunities for improvement in the management and supply of SUS services, provided that it is used following appropriate principles, methods, and techniques[5,6,7].

It is noteworthy that the reality of health in Brazil demonstrates a lack of reliability on the part of its users and management inconsistencies, which are consolidated in ineffective actions and unnecessary costs. SUS maintenance costs are in the order of 170 million reais per year, considering the three spheres of the federation, an investment that should take place to expand the population’s access to essential health services and impact the reduction of morbidity and mortality[8].

Therefore, the auditor must verify the execution of the actions and services regarding the budgetary, operational, and equity aspects; and analyze the conformity of the expenditure, as well as of the processes and result, having as guidelines for its performance the capillarity, decentralization, and integration to ensure operation throughout the national territory, with division and definition of specific tasks in each sphere of SNA management and emphasis on measuring the application of resources and user satisfaction[7].

The existence of the audit area can contribute to improving the use of resources to avoid waste, fight corruption and provide fragility and potential of the health system indicators to the manager, providing its planning and adapting it to the needs, thus enabling this area to become a solid and indispensable ally in health promotion processes[9,8].
Thus, audit activities must be carried out satisfactorily at various levels, enabling essential information to be used in health management. To understand the performance of the service, this research targeted the municipal components of the Unified Health System in a Northeast state in 2017 and 2018. From this perspective, the study aims to describe the performance of the Unified Health System auditing in a Brazilian state, guided by the following question: How is the audit components performance as a part of the SNA in Rio Grande do Norte?

**METHODS**

It is a descriptive study, carried out in 2017 and 2018, in the State of Rio Grande do Norte (RN), a federative unit that has 167 municipalities, distributed in eight health regions, namely: Litoral Sul e Agreste (a wild area) (with 27), Oeste (with 15), Mato Grande e Salineira (with 25), Seridó (with 25), Trairi e Potengi (with 21), Alto Oeste (with 36), Região Metropolitana (with 5) and Vale do Açu (with 13 municipalities).

The study was divided into four stages: mapping audit systems in municipalities; elaboration of questionnaires for data collection; sending the questionnaires to the auditors, and collected data analysis.

The audit service mapping process corresponded to locating the cities that had the audit service in the Health Region, following the steps, namely: 1- search for the telephone/e-mail contact of the Municipal Health Departments on their websites; 2- call and/or sending an email, initially to explain the project and, later, to obtain information on the existence of these SNA components.

For the data collection regarding the professionals who worked in these services, first, a questionnaire was elaborated using the Google Docs construction tool. This questionnaire contained open questions to capture the auditors’ perception of their work: infrastructure, motivation, workload, and importance. In this excerpt, the following questions were addressed: what are the material resources (Internet, computers, etc.) available for carrying out the activities?, in which position, regarding the importance and impact of your profession for society, do you believe the audit would be placed?, and what is the relevance of specific training for the area?

The questionnaire was sent to each municipality contacted to detect the SNA component, with both telephone contact and an email sent to the municipal health secretariats. In addition, the survey details and their participation importance were explained to the auditors.

The study population corresponded to the 66 auditors distributed by regions and the respective coordinators of the municipal audit components. The sampling had a small population, respecting a confidence interval of 95% and a margin of error of 5%, which would include 57 participants, but the final post-collection sample resulted in only 18 participants given the refusal to participate.

The following inclusion criteria were used in the study for the stage of applying the questionnaires: municipal auditors in the exercise of their functions and who voluntarily answered the questionnaire sent. Therefore, the study excluded auditors on vacation schedules, those with function diversion to other sectors, and those who refused to participate in the research.

The simple quantitative description of numbers and percentages was used to characterize the collection regarding the existing audit systems in data analysis. For the answers obtained by the questionnaires, the data were treated through lexicographical analysis of similarity - a strategy that makes it possible to identify the co-occurrences and connectedness between the words - using the software Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires (IRaMuTeQ).

The research followed the ethical precepts, respecting the norms in Resolution No. 466/12, being approved by the Ethics Committee, and obtaining the Opinion of Ethical Appreciation No. 2,577,321. All participants signed the Informed Consent Form and were identified by alphanumeric code names to preserve their identity.

**RESULTS**

The audit components mapping consisted of identifying the coverage of these services in the 167 municipalities of RN to describe how the components of the National Audit System of the SUS are in the state. From this mapping, the following data emerged:

Of the 167 municipalities (100%), 95 (57%) said they did not use these services, and in 63 (38%) it was not possible to obtain information, so only 9 (5%) municipalities responded that they had audit services (Table I).

The reason why it was not possible to obtain this information is that the professionals responsible for the service stated that they did not know about the subject at the time of the telephone contact to the numbers available on their official pages and in the secretariats.

<table>
<thead>
<tr>
<th>Municipalities of Rio Grande do Norte</th>
<th>Number of municipalities</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responding municipalities that have the audit component</td>
<td>9</td>
<td>5%</td>
</tr>
<tr>
<td>Responding municipalities that do not have the audit component</td>
<td>95</td>
<td>57%</td>
</tr>
<tr>
<td>Municipalities where it was not possible to obtain information</td>
<td>63</td>
<td>38%</td>
</tr>
<tr>
<td>Total</td>
<td>167</td>
<td>100%</td>
</tr>
</tbody>
</table>

With regard to the respondent municipalities that had the audit component, the highest concentration was in the metropolitan region (7th Health Region), and the 3rd Region did not present any active component. (Table II).

Table II - Description of health audit services in Rio Grande do Norte by Health Region, according to respondent municipalities. Natal, Rio Grande do Norte, Brazil, 2017.

<table>
<thead>
<tr>
<th>Health Region</th>
<th>Number of municipalities</th>
<th>Number of municipalities that have the audit component</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Region</td>
<td>27</td>
<td>1</td>
</tr>
<tr>
<td>2nd Region</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>3rd Region</td>
<td>25</td>
<td>-</td>
</tr>
<tr>
<td>4th Region</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>5th Region</td>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td>6th Region</td>
<td>36</td>
<td>1</td>
</tr>
<tr>
<td>7th Region</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>8th Region</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>162</td>
<td>9</td>
</tr>
</tbody>
</table>

Regarding the perceptions of the auditors from the questioning about the infrastructure resources offered (such as computers, Internet access, printer, car, table, office material, and own file), indicated that they existed but, they were insufficient, and there was the use of personal items to perform work in some situations.

In this way, it can be understood as something partially attended since, in their workplaces, there were rooms for the audit body, with computers and other materials, however; for the proper functioning of the work process, the place still did not have spaces and individualized materials for each auditor, such as enough computers and adequate Internet access, which is exemplified in the following speech:

"Without proper provision by the government. The use of work tools/materials resources is the responsibility of the auditor, using all their own equipment, including using their vehicle for commuting to develop their activities." (J3)

Regarding the questioning about the importance of the profession for society, an audit is considered a relevant tool for evaluating the adequacy of programs and effective control over income and expenses, also contributing to the performance of economic analyzes in health, as indicated in the following statement:

"The audit contributes to the correct application of public resources, (since) it evaluates and monitors the quality of the service offered, as well as the user (dis)satisfaction; identifies irregularities, frauds; recommends to the manager and competent bodies suggestions for appropriate measures; notes the need to expand or reduce services, according to user demands; subsidizes managers, Health Council, MP, Judiciary, among others; evaluates management and issues opinions; evaluates contracts; meets external demands when requested." (A2)

Other highlighted points in the speeches were: the close relationship of the audit with legal and accounting sciences and the possibility of daily action towards the qualification of SUS management and health care, that is, answers that fall within the scope of qualification of management and assistance. The discussion is exemplified in the lines that follow:
“(...) I believe that, in this profession, I could contribute more to the effectiveness of the SUS and a better qualification of the assistance offered to citizens.” (A2)

“The SUS audit emerges, especially in the scenario of ethical and moral crisis in public administration, as the constitutional guardian of one of the largest operational budgets in the State. Through a well-structured audit component, it is possible to systematically qualify all aspects related to management, user care, and work processes - indispensable factors for services committed to the precepts of Brazilian public health.” (A5)

Regarding the impact of the functions as an auditor on the health of a population, the answers showed the impact of the work in generating savings for the SUS from the monitoring of contracts, the verification of compliance, and the production of reports with the possibility of setting priorities for the health of the population, enabling economies of scale in some procedures:

“Extremely important in the fight against irregularities, improprieties, and illegali"ties that, unfortunately, permeate the user’s daily life, especially in the scope of consultations and procedures regulation, the welcome in health, and the service quality parameters.” (D2)

“ Routinely, it is necessary to intervene in the control and regulation sector for technical-pedagogical matrix support and diligence associated with findings in the scope of marking and carrying out surgical procedures. Integration with these other sectors is frequent in the effort to monitor the Integrated Covenanted Programming and the Inter-federative Agreement on Health Indicators.” (K4)

Regarding motivation, when asking about the reason, the answers presented the possibility of contribution in an area that differs from the direct action of health care. The identification with the work, the health area, and regulation, as well as the employment opportunity, which reveals an affinity with the service, are points that show the interest of these professionals in auditing:

“I’m motivated because it’s a job in which I contribute in some way to controlling the expenses of the Unified Health System (SUS). It makes me happy to know that I am helping to reduce the expenses paid by the Municipal Health Department, and this saved resource will meet another demand in health.” (A5)

“I feel fulfilled in the exercise of my role, I get along well with the team and management, we share difficulties and knowledge, which facilitates our performance; whenever possible, I take part in training, I advise providers when I identify non-conformities so that they are solved, and they are duly complied with.” (A3)

The other questioning point concerns the need for the professional auditor to have some academic training, preferably in the health area. All answers converged to the affirmation of this need for “specialized knowledge” in health, in which the technical perspective, knowledge of SUS legislation, and the procedures performed are very specific:

“Yes, if you are an auditor in health services, you must know the area. In addition, the need for auditors from specific/technical areas is highlighted, such as legal, accounting, and statistical advice.” (A9)

Furthermore, knowing the procedures to be audited facilitates the performance of functions, so that training in related areas and in specific areas to be a health auditor is necessary, such as legal, accounting, and statistical advice. Participant A11 reported in his speech:

“I believe so because a more profound knowledge of health is needed so that an effective, safe, and reliable inspection can be carried out.” (A11)

The consolidation of these statements is shown in Figure 1, generated by the similarity analysis of the textual corpus produced with the reports that answered the questions, representing the structure of the content of the textual corpus. At the center of the analysis are the words “service”, understood as a signifier of the actions performed, and its three equally important ramifications, represented by the words “audit”, “health”, and “public”, symbolizing the studied context. In addition, the interconnecting terms suggest that this service is of quality, enabling access monitoring for users of these services.

The term “audit” points to an evaluation interconnected with words such as “manager” and “financial”, highlighting the population understood as the one that suffers the higher impact of actions or the absence of this type of health service. The term “health” points to a need for the existence of audit services, which must be performed with adequate knowledge, bringing benefits to the management. The term “public” is linked to the word “resources” so that one can see how much the other terms point to the correct application and expenditure control actions.
Figure 1 - Similarity analysis on the perceptions of the interviewed auditors, 2017-2018. Natal, Rio Grande do Norte, Brazil, 2017.

DISCUSSION

The number of municipalities that did not have health audit services in the state of Rio Grande do Norte during the period in which this study was carried out is worrying. To this situation are added those municipalities in which the information was non-existent, pointing to an incipient action, in this way, of controls applied to health, demonstrating an absence of coverage of less than 50%.

In this regard, there is an urgent need to raise awareness for a process of development of such service, as the area contributes to improving the use of resources, reducing waste, and fighting corruption, as stated by Denasus when highlighting the audit as a planning tool for the manager who provides data on the weaknesses and potential of the health system\(^{5,6-10,11}\).

Therefore, interventions must be implemented aiming to offer adequate training to the professionals involved in the process or add human resources with appropriate preparation, aiming at promoting responsibilities regarding accountability and transparency of the subjects and processes involved, aligning SUS principles and guidelines to encompass better knowledge and action in the area of auditing\(^{5,6,11,12,13}\).

Regarding the perception of professionals about the infrastructure, it was noticed that they existed, but they were insufficient, which denotes inadequate spaces for carrying out activities. It is relevant to highlight that audit activities are usually carried out in self-executing places, such as their offices, especially when it comes to planning their actions, that is, the analytical phase\(^{5,6,14,15}\).

In this way, other places such as the auditee establishments are also considered places of activity, with the auditor presence being recognized as the on-site or operational phase of the audit, which refers to the dependence of third parties on the provision of infrastructure\(^{3,5-15}\).
Therefore, inadequate infrastructure conditions, such as transport, daily rates, number of auditors, added to other limiting factors, hinder the auditor's work process in SUS\(^{(11-16)}\).

Regarding the importance and impact of these services on society, the perception of those interviewed in this study was optimistic about how much their actions can help to transform the health services provision scenario, how to contribute to the effectiveness of the SUS, and improve the assistance qualification offered to citizens. In this sense, the actions of the National Audit System (SNA) aim: to improve management with transparency; encourage and support social control; enable society's access to information and results of SUS health actions and services, contributing to the guarantee of care for users in defense of life\(^{(6,7-10)}\).

From this angle, committed to supporting SUS management, the SNA requires professionals working in the logic of a social observatory of the issues of SUS resolution to effectively contribute to the construction of a health model aimed at quality of life and citizenship\(^{(1-10)}\).

The exercise of the auditor role in the health area demonstrated, in the current study, to be something that brings fulfillment in the professional activity, since there is the possibility of working in an area that goes beyond direct user assistance, impacting other aspects of great importance in the provision of health services, such as the management of financial resources in health. It is relevant to point out that SUS financial management is quite complex and involves a series of rules, which must be followed by each of the entities of the federation, with the need to know the established flows of financial resources and how their attachments rules must be followed\(^{(6,7-10)}\).

Considering the discussion and global transformations, such as new professional requirements, especially concerning ethical and attitudinal aspects, new contexts permeate the managers' agenda, determining trends that health professionals are expected to meet, such as audit\(^{(18)}\).

Thus, considering that a health audit is a relevant tool for control and evaluation in health organizations, aiming to improve the quality and resolvability of the services provided, it requires technical knowledge of various professions, which has made this activity a field of knowledge and multidisciplinary practice with a considerable degree of complexity\(^{(7-9,19)}\).

The professional auditor contributes to the correct application of public resources, evaluates and monitors the quality of the service offered and the user (dis)satisfaction, and identifies irregularities and frauds. He also recommends suggestions for the appropriate measures to the manager and competent bodies; notes the need to expand or reduce services, according to user demands; in addition to subsidizing managers, Health Councils, Public Ministry, Judiciary, among others; evaluates management and issues opinions, contracts and meets external demands when requested\(^{(10-14,15)}\).

The study results point to a weakness in the components of the National Audit System in the municipalities of Rio Grande do Norte concerning its structure, evidenced by the lack of knowledge on the part of managers of actions and services inherent to the practice of health audit, and a shortage of human resources. The results presented here are limited to a specific region, so generalization of the data cannot be performed. In this way, they raise the need to develop new studies for a deeper understanding of the service reality, which is of singular importance in the health promotion process\(^{(20)}\).

In addition, the panorama described above points to the need for interventions that seek to improve the coverage of audit services, with a focus on wide dissemination of their importance for the management of municipalities, professional qualification, and support for the execution of activities.

Some limiting factors made it impossible to have a more detailed description, such as obtaining information from the municipal health departments, since there is no compiled list of them on their websites and that, when available, they do not have up-to-date information.

**FINAL CONSIDERATIONS**

The description of the audit components' performance in the State of RN showed a scenario of concern due to the impossibility of a more detailed description of the distribution of the components in the state, according to the limitations mentioned above.

Despite this, the perception of professional auditors about their work process denoted the great importance of the health service. The auditors understood the prominence of their profession in the health work process, highlighting the need for training in the area so that goals are achieved and increase the quality of the service provided.

Therefore, it is understood the need to develop more research in this area for a more assertive and in-depth understanding of its components and their functioning. It is understood, in this way, that it will be possible to provide
subsidies for actions and promote strategies that extend beyond theory this component that is so fundamental for the functioning of the SUS.

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To the School of Health of the Federal University of Rio Grande do Norte.

The authors inform that there are no conflicts of interest.

CONTRIBUTIONS

The authors participated in all stages of the research, with substantial contributions in the elaboration and design of the study; in the acquisition, analysis and interpretation of data; and in writing and/or reviewing the manuscript. All authors approved the final published version.

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