

84 - ANALYSIS OF SINAN DATA QUALITY FROM TB INDICATORS OF STOCK OF TUBERCULOSIS SURVEILLANCE IN THE STATE OF PARAÍBA IN YEAR 2006

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INTRODUCTION

Tuberculosis is still a serious public health problem for developing countries, although the rate of prevalence and mortality have had a slight decrease in the course of several years. One third of the world's population is infected with *Mycobacterium tuberculosis*. According to estimates for 2005, there were 8.8 million cases worldwide, with 1.6 million deaths from disease, including 195,000 patients infected with HIV (World Health Organization, 2007).

Brazil occupies the 15th place among 22 countries responsible for 80% of all cases of the disease in the world. It was estimated a prevalence of 142 million infected, with about 111,000 new cases for 2005 (World Health Organization, 2007). The number of deaths, the second estimate of the National Plan for Control of Tuberculosis (PNCT) in 2005, was of 6,000.

In Brazil, TB is defined as a priority among government policies on health. The morbidity by the disease in our country is monitored through the reporting of new cases and is included in the current Ordinance No 05 of February 21, 2006 the Ministry of Health - MS / Secretariat of Health Surveillance - SVS, which defines the diseases of notification compulsory throughout the national territory and notification system as the Information System of worsening Notification - Sinan (BRAZIL, 2002a).

Following a trend, the actions of the State Control of Tuberculosis - PECT in the state of Paraíba, are decentralized in 223 municipalities, with coverage of the PCT from 82.5% and population coverage of 95% in 2006 (PARAÍBA, 2007). As well as the actions of PECT-CP, the Sinan is decentralized to the 223 municipalities that make up the state, distributed in 12 Regional Health Management. With this process of decentralization of information by Sinan, it is observed that the quality of data that system that feeds the central level of the State Department of Health is impaired, leading us, as professionals involved in the analysis and tracking of such data, the identification of the problem (BRAZIL, 2007).

This problem is reflected in the records incomplete and inadequate filling of individual notification Sheet (IFI) and the Monitoring Bulletin (BA) of Regional Health Management - GRS, contributing to the inconsistencies, resulting in information without quality, unreliable and may interfere the indicators produced from this information.

Faced with the problem, it aims to identify the major inconsistencies of Sheet Notification / Research and Monitoring Bulletin that feed the BD Sinan from the actions of indicators for the monitoring of tuberculosis in the state of Paraíba in the year 2006.

METHODOLOGY

It is a descriptive study, with quantitative approach, including variables specific to the Type-Notification / Research and Monitoring Bulletin.

The study was conducted at the State Department of Health of New Hampshire with data from Sinan Tuberculosis, made by the Management Operacional Rapid Response, where they are concentrated all the data reported by municipalities in the information system Sinan / TB.

Data collection was performed by three researchers at the turn of the afternoon, from Monday to Thursday, during the months of July and August 2007, the Management Operacional Rapid Response / Information System in Health SES-PB.

To examine the quality of the data contained in the Notification Sheet / Bulletin of research and monitoring, the indicators used as a tool for assessment, planning and reorientation of shares of surveillance, recommended by the Ministry of Health of selected guide epidemiological surveillance of tuberculosis-2002 (BRAZIL, 2002a). This guide contains 16 items, some of which were adapted to condense them to understand that they are covering, they are: number of cases diagnosed; proportion of cases of smear positive (BK) among the total of lung; proportion of cases of pulmonary tuberculosis (PT) between cases of tuberculosis (TB) of all forms; proportion of cases of TP to smear not held between the total number of cases of TP; proportion of positive smears between performed for diagnosis; index of relationship Contacts / case examined; percentage of WT (BK) cured and no proven record; percentage of abandonment in TP (BK); percentage of cases without informing the outcome of treatment; percentage of supervised treatment, a proportion of cases where the test is performed for HIV; percentage of cases associated with HIV / AIDS, tuberculosis incidence rate in every way (by sex and age group); percentage of new case with the use of ethambutol; percentage of relapse and return after abandonment without the use of ethambutol.

The collection was proceeded after authorization from Coordination of Epidemiological Surveillance, Management Board of Health Surveillance, the State Department of Health Research found the ethical envisaged in the resolution 196/96 of the National Council of Health-CNS, but as this is analysis of secondary data there was no need for the End of Free and Informed Consent FICT.

The data were taken from the Sinan-TB through Tabwin and exported to the Excel spreadsheets. Searches and comparisons were made of the variables of Sheet Notification / TB Research and Monitoring Bulletin, where he performed the calculations of the indicators from the array of programming demand of cases by the method based on the estimated number of respiratory symptoms of Professor Germano Gerhardt, taking as a parameter for evaluating the advocated by PNCT.

RESULTS AND DISCUSSION

After the lifting of the database of tuberculosis in the State Department of Health, have worked some indicators that include items for evaluation, planejamento and reorientation of the actions of surveillance established by the Ministry of Health, selected the Guide to Epidemiological Surveillance-Tuberculosis (BRASIL, 2002a).

Analyzing the item 1, which corresponds to the number of cases diagnosed, it is observed that the estimate of the number of cases to be identified was 2598 and 1166 were identified by generating a coverage of 44.9%, resulting in an underreporting of 55.1 %, Or one percent below the target recommended by MS is that the identification of 70% of cases (BRAZIL, 2002a).

This indicator evaluates the coverage and under-reporting of cases of tuberculosis estimated in the array of programming and is based on the method of the number of respiratory symptoms in the estimated population (BRAZIL, 2002a).

The data identified in the study show the need for a joint analysis with other departments, to identify and overcome the

weaknesses in the process of finding and reporting cases of the disease. According to the proportion of smear positive cases (BK +), taking into account the total of pulmonary tuberculosis (item 2), the 1166 cases reported in 2006, 1030 are the pulmonary form, with those 73.7% (663) with BK +.

The data found in the study agree with the assertion of Griep (2007) when it tackles the percentage expected in the form of smear positive pulmonary tuberculosis is 70% and MS points as acceptable by 64% (BRASIL, 2002c).

Observing the proportion of cases of TP between cases of TB in all forms (item 3), the state of Paraíba presents a percentage of 88.3%, so within the estimated by the Ministry of Health (2002c) that is 88%, although the literature that presents cases of TB, it is expected that 90% are lung. This indicator is important, because it allows the control of the way of spreading the disease.

As the proportion of cases of TP to smear not held between the total number of cases of WT (item 4), it was shown that the state presents a significant percentage of smear not performed (12.7%). This finding leads to questions of quality of service diagnosis, which is one of the pillars of the strategy to control TB, which is to provide rear laboratory (BRAZIL, 2002b).

The pillar "Detection of cases by smear between respiratory symptoms that require general services," relates to the action of managers to ensure the necessary resources to facilitate the diagnosis and control of tuberculosis (LIMA, 2007).

Analyzing the proportion of positive smears between performed for diagnosis (item 5), 669 cases (71.3%) of tests were positive. The overall outcome of the state is within the recommended by the Health Ministry, which is 70% (BRAZIL, 2002a) may positivity is related to proliferation or pathogenicity of the bacillus.

According to the index of relationship contacts examined / if (item 6), we observed that the ratio of the registered cases for each contact was examined 0,5:1.

MS recommends that for each case should be examined considered four contacts, as the people who live directly with the individual involved. This indicator is related to the activities of monitoring, analysis and dissemination (BRAZIL, 2002a).

Analyzing the percentage of pulmonary tuberculosis with positive sputum smear proven curados and unsubstantiated information (item 7), of 663 cases of TP + BK, 141 (21.3%) had negative smear results, 2 positive, 54 (8.1%) did not perform and 466 (70.3%) without information. Thus, the state presents a low percentage of proven cure, considering that the DM says that you must perform smear in 100% of cases at six months for evidence of healing (BRAZIL, 2002a).

The biggest inconsistency was observed in a high percentage of cases without information, interfering with the analysis of the indicator that shows the effectiveness of treatment. Another serious inconsistency was evident in two cases such as closures of healing with results of smear positive. Two cases of TP + BK, the New Hampshire gives 28 (4.2%) cases of noncompliance, and is considered acceptable by MS, which refers to be less than 5% (BRAZIL, 2002b).

The New Hampshire gives a percentage of 47.0% of cases without informing the result of treatment (item 9). This result creates inconsistency in the information, showing that the cases were not closed due course, impossible to assess the outcome of treatment and cohorts of cases (BRAZIL, 2002b).

We observed the item 10, the pulmonary form presents a higher percentage of Directly Observed Therapy (63.9%), ranging from 50.2% to 100% from the Regional Health Management MS recommends 80% of supervised treatment for pulmonary form positive As the form of the disease infecting (BRAZIL, 2002b).

The proportion of cases where the test is conducted for HIV (item 11), the state has a percentage of 20.8% of the test anti-HIV drugs.

MS instructs that the test is offered anti-HIV drugs in 100% of the cases diagnosed, because it could interfere with the indicator co-infection of TB / AIDS, considering the relationship between the two diseases (BRAZIL, 2002b). Therefore, the data analyzed show that there may be many cases of HIV / AIDS in the state, taking a percentage of 71% than done.

Of the total of 1166 cases registered in the state, 44 (3.8%) were co-infected TB / AIDS. Of the 44 cases, 36 with the result of anti-HIV positive, 5 did not perform, 2 no information and 1 in progress.

Because of the importance of this indicator, it called the attention of records that are in the system, as co-infection, and results show that not prove the diagnosis, generating divergent information. This may also reflect an underreporting due to problems related to the structure of laboratories to offer coverage to all health services that have deployed the PCT.

Analyzing the incidence of tuberculosis in every way according to gender and age group, found that incidence in the population younger than 15 years is higher in the female population, giving the state a total of 4.6 per 100,000 inhabitants. and the male 2.8 per 100,000 inhabitants. In the larger population of 15 years, we see an incidence of 51.9 per 100,000 inhabitants. the male population and 27.0 per 100,000 inhabitants in women.

In 2006, we identified 1007 new cases of tuberculosis, of these, 15 (1.5%) made use of ethambutol, reflecting the misuse of such drugs, whereas the MS recommends that all cases use the new Schedule I (Rifampicin, Isoniazid and pyrazinamide) or, inconsistency in filling the record (BRAZIL, 2002b).

There was a total of 71 cases of recurrence (RR) and return after abandonment (RA). Of these, 19 (26.8%) have used the therapeutic scheme recommended by the Health Ministry, namely Schedule RI - rifampin, isoniazid, pyrazinamide and ethambutol (BRAZIL, 2002b).

CONCLUSION

We considered in this study, the data quality of Sinan-TB in the state of Paraíba, to identify the inconsistencies that can influence the operational indicators, evaluation, planning and reorientation as well as in epidemiological that are formulated by the Ministry of Health to tuberculosis.

The institutions have a responsibility to provide information about the disorder. What can be seen, however, is that this information is inadequate, ignoring sight of its analytical potential. Therefore, the need to improve the quality of information must not be understood merely in technical terms, but as an opportunity to be involved in making decisions consistent with a view to improving the PNCT.

We must define responsibilities that fall to each institution, because the generation of information there is a considerable cumulative loss in the flow of this process, resulting from the fact that the institutions did not properly perform their duties, targeted only for the transfer of information, not being considered for the it is quality. That undermines the quality of decisions for action, according to the poor quality of statistics systematized in the Department of Health, interfering in the indicators for assessing, planning and reorientation.

Finally, it is observed that the indicators worked lead to other inconsistencies, confirming the assumption of this work on the quality of data on indicators worked.

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ANÁLISE DA QUALIDADE DE DADOS DO SINAN TB A PARTIR DOS INDICADORES DE AÇÕES DE VIGILÂNCIA DA TUBERCULOSE NO ESTADO DA PARAÍBA NO ANO 2006

ABSTRACT

This study aimed to assess the quality of data from the agravo Tuberculosis in the state of Paraíba, Brazil in the year of 2006. This is a descriptive study of secondary data, with quantitative approach, including specific variables in the sheet Notification / Research and Monitoring Bulletin, with use of Tabwin and Excel spreadsheet for analysis of the data. These data were obtained from the Information System of Agravo Notification-Sinan-TB, the Secretary of State for Health. The results showed inconsistencies in the registry data to generate information that can interfere with operational and epidemiological indicators for the control of agravo, with emphasis on those relating to: TB co-infection / AIDS; Closure of cases with 47% without information, and, revealed the adoption of Schedule I to undue cases of Reingressos and Recurrences and IR scheme for new cases. Concluded that there is an urgent need to improve the quality of data in Sinan / TB. We recommend an effective performance monitoring, evaluation of the actions of the Program for Control of Tuberculosis, may cause a significant leap in the quality of the data, therefore the influence of appropriate indicators for monitoring the operational and epidemiological situation of tuberculosis by the Town, State and Union.

Key words: Notice; Tuberculosis; Information on health.

ANALYZE DE LA QUALITÉ DES DONNÉES DE SINANTB DE LA INDICATEURS DE STOCK DE LA SURVEILLANCE DE LA TUBERCULOSE DANS L'ETAT DANS LE PARAÍBA EN 2006

Cette étude visait à évaluer la qualité des données plus la tuberculose dans l'Etat de Paraíba, Brésil, en 2006. Il s'agit d'une étude descriptive des données secondaires, avec approche quantitative, y compris les variables spécifiques à la notification de type / de recherche et de surveillance Bulletin, avec l'usage de Tabwin feuille de calcul Excel et de l'analyse des données. Ces données ont été obtenues par l'intermédiaire du système d'information Schengen de nouvelle notification - Sinan-TB, le Département d'État de la Santé Les résultats ont montré des incohérences dans les données du registre à générer des informations qui peuvent interférer avec des indicateurs épidémiologiques et de lutte contre la maladie, en mettant l'accent sur celles qui ont trait à: la tuberculose co-infection / sida; fermeture des cas avec 47%, sans information, et révélé la mauvaise adoption de l'annexe I de la réapparition de cas et des retours et IR régime pour les nouveaux cas. Nous concluons qu'il existe un besoin urgent d'améliorer la qualité des données dans Sinan / TB. Nous recommandons un suivi de la performance, l'évaluation des actions du contre la tuberculose, ce qui peut provoquer un important pas en avant dans la qualité des données, d'où l'influence d'indicateurs appropriés pour le suivi opérationnel et la situation épidémiologique de la tuberculose par comté, l'État et de l'Union.

Mots clés: Avis, la tuberculose, de l'information sur la santé.

ANÁLISIS DE LA CALIDAD DE LOS DATOS DE SINAN TB DE LOS INDICADORES DE EXISTENCIAS DE LA VIGILANCIA DE LA TUBERCULOSIS EN EL ESTADO DE PARAÍBA EN EL AÑO 2006

RESUMEN

El objetivo del estudio fue evaluar la calidad de los datos más tuberculosis en el estado de Paraíba, Brasil, en 2006. Es un estudio descriptivo de los datos secundarios, con enfoque cuantitativo, incluyendo las variables específicas para el tipo de notificación / Investigación y Boletín de Vigilancia, con el uso de Tabwin y hoja de cálculo de Excel para el análisis de los datos. Estos datos fueron obtenidos a través del Sistema de Información de Schengen para seguir Notificación - Sinan-TB, el Departamento de Estado de Salud Los resultados mostraron inconsistencias en el registro de datos para generar la información que pueden interferir con el funcionamiento y los indicadores epidemiológicos para controlar la enfermedad, con énfasis en los relativos a: TB co-infección / SIDA; cierre de los casos con el 47% sin información, y puso de manifiesto la inadecuada adopción de la Lista I a los casos de recurrencia y Devoluciones IR y régimen de nuevos casos. Llegamos a la conclusión de que existe una urgente necesidad de mejorar la calidad de los datos en Sinan / TB. Le recomendamos una efectiva supervisión de la ejecución, la evaluación de las acciones del Programa de Control de la Tuberculosis, lo que puede causar un importante salto en la calidad de los datos, por lo tanto, la influencia de los indicadores apropiados para el seguimiento de las actividades operacionales y de la situación epidemiológica de la tuberculosis por el Condado, Estado y Unión.

Palabras clave: Notificación; Tuberculosis; información sobre la salud.

ANÁLISE DA QUALIDADE DE DADOS DO SINAN TB A PARTIR DOS INDICADORES DE AÇÕES DE VIGILÂNCIA DA TUBERCULOSE NO ESTADO DA PARAÍBA NO ANO 2006

RESUMO

Este estudo teve como objetivo avaliar a qualidade dos dados do agravo Tuberculose no Estado da Paraíba, Brasil, no ano de 2006. Trata-se de um estudo descritivo de dados secundários, com abordagem quantitativa, incluindo variáveis específicas da Ficha de Notificação/Investigação e do Boletim de Acompanhamento, com uso do Tabwin e planilha Excel para análise dos dados. Esses dados foram obtidos através do Sistema de Informação de Agravo de Notificação Sinan-TB, da Secretaria de Estado da Saúde. Os resultados demonstraram inconsistências no registro dos dados para gerar informações que podem interferir nos indicadores operacionais e epidemiológicos para o controle do agravo, com destaque para os que se referem à: co-infecção TB/Aids; encerramento de casos com 47% sem informação, bem como, revelaram a adoção indevida do esquema I para casos de Reingressos e Recidivas e esquema IR para casos novos. Concluímos que há uma necessidade imperiosa de melhorar a qualidade dos dados no Sinan/TB. Recomendamos uma efetiva atuação de monitoramento, avaliação das ações do Programa de Controle da Tuberculose, o que pode provocar um importante salto na qualidade dos dados, conseqüentemente na influência dos indicadores para acompanhamento oportuno da situação operacional e epidemiológica da tuberculose pelo Município, Estado e União. **Palavras chave:** Notificação; Tuberculose; Informações em saúde.