63 - INVESTIGATION OF TUBERCULOSIS COMMUNICANTS: PERFORMANCE OF HEALTH SERVICES

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1. INTRODUCTION

From the infectious diseases, Tuberculosis (TB) still constitutes the main cause of obits among adults around the world, even after more than a decade of its declaration as an emergency health problem. Brazil is one of the 22 countries which were prioritized by the World Health Organization (WHO/OMS), which covers 80% of the world disease incidence, occupying the 19th position in the case incidence ranking. In 2010, 70,601 cases were notified, with incidence of 37.9 and prevalence of 29 cases per 100,000 inhabitants, respectively (BARREIRA, 2011).

This information appoints the risk to the population of being infected or re-infected by the TB bacillus. The risk will depend on the intensity and time exposure of the bacillus. Moreover, it will also depend on factors like age, immunologic and nutritional status, intercurrent diseases, socio-economic conditions (MENEZES, 2002). It is important to emphasize that the investigation of the contacts of TB patients constitutes an important way of preventing the occurrence of new cases of the disease. Individuals affected by the pulmonary form of TB, without treatment, are able to infect from 10 to 15 people a year (GAZETTA et al., 2006).

The Brazilian National Tuberculosis Control Program (NTCP) establishes as priority strategic axis to confront and control the disease the search for precocious diagnosis of cases, stimulating the capture and exams in symptomatic respiratory (SR) in demand of health services and in community (HABIBULLAH, 2004; SANTOS, 2005). Once a new case of disease is identified, it is necessary to follow an epidemiological investigation by offering tests for the contacts of the patient (MONROE et al., 2008).

Although recommended by NTCP, the control of communicants as a way of precocious diagnosis and diminution of the dissemination of disease has not been adopted as a practice in the routine of the health services. One of the obstacles is related to little knowledge of the health professionals about the importance of this action as a way to the identification of new cases. Other is the lack of a systematic assistance through registers in the information system (GAZETTA et al., 2008).

The importance of the present study is justified because of the relevance of the evaluation of communicants and the prevention actions in the family and community as part of health surveillance. Therefore, this study aims to analyze the performance of health systems in the investigation of tuberculosis patient communicants.

2. METHODOLOGY

Epidemiological research, sectional (inquiry), of quantitative approach, developed in João Pessoa – PB, municipality chosen by the Ministry of Health as having priority in the tuberculosis control. The municipality has 702,234 inhabitants and organizes the health attention in a regionalized way dividing it into five Sanitary Districts with 180 Family Health Units (FHU), which covers 84% of the population (IBGE, 2010). For the cases of TB, there are two gateways in the municipality: FHU and Tuberculosis Reference Center - Hospital Clementino Fraga (CHCF), which is considered reference in the diagnostic and treatment of TB in Paraiba.

The study was constituted by patients under TB treatment who live in João Pessoa, except patients under 18 years and the prison population. The size of the estimated sample was calculated through Statistic program (using the commands Several means, ANOVA, 1-Way) and considering the parameters: probability of error type I = 0.05; probability of error type II = 0.20; variation due to error = 0.2, it was determined that 98 informers would be necessary (HAIR et al., 2005). The sampling process was, by convenience, due to the necessity of collecting data of all patients under treatment. Four months were necessary to reach this minimum value.

The data were collected by means of primary sources (interviews with patients) using a questionnaire which was adapted and validated by Villa and Ruffino Netto (2009), containing the evaluation indicators of the TB control actions under the Primary Health Care.

The following variables were elected for this study: identification of symptomatic respiratory at home; Laboratorial and radiological investigation of contacts; Realization and monitoring by home visit; Dialogue with family about disease and patient; Approaching about the life conditions of the family.

The interviewed people answered each question according to a predetermined scale of possibilities, Likert scale. The value zero was attributed to the answers “I don't know” or “not applicable” and the values from 1 to 5 registered the degree of preference (or concordance) of the statements. The data were entered and stored in a spreadsheet in Microsoft Excel 2003 and transferred to the Data Entering Table of Software Statistica 9.0 of Statsoft. The studied variables were categorized or dichotomized according to their specificities, compared between different health units and analyzed in frequency tables with application of Pearson's chi-square test to evaluate proportions.

The research was submitted to the appreciation of the Research Ethics Committee of the Federal University of Paraiba, and it was approved under protocol nº 0589. The confidentiality of information contained in the questionnaires was guaranteed. In addition, a written consent was requested to all interviewee.

3 RESULTS AND DISCUSSION

To analyze the performance of health services which carried out the TB diagnosis, it was decided to group them into three categories: Primary Care Services (PCS), which include the Health Family Units; Tuberculosis Reference Center (TRC) and Specialized Services (SS), category which grouped Private/General Hospitals, Polyclinics, and Private Doctors.

Table 1 show that 53 of the diagnosed cases in the studied period, corresponding to 54.0%, were diagnosed by TRC. The search for Symptomatic Respiratory (SR) at home was realized independent of the kind of service which diagnosed TB. In the use of association test, significance level 5% ($\alpha = 0.05$), it became clear that there is no association between the variables which characterized the demand for SR in the home of patient by the service health that diagnosed TB ($p = 0.5941$).

Regarding to the visit of the patient's house, PCS presented the highest coverage percentage, with 94.1% (p= 0.0274). There is no association between the variables which analyze the evaluation of home communicants with sputum examination (p=0.9311), chest X-ray (p=0.3215) and Tuberculin Skin Test (p=0.1007). Among the diagnosed cases in PCS, 58.8% of communicants "never" were investigated by sputum smear. This percentage reached 69.8% in TRC and 64.3% in SS. The tuberculin skin test was the least requested exam in the three categories of the evaluated services.

The results do not show association between the variables which evaluate if the health service that diagnosed TB talked to the home communicants about TB (p= 0.5422) and about their life conditions (p= 0.3846).

These outcomes indicate the need for adjustments both in the planning and/or organization of actions, whose focus privileges the appropriated accomplishment of official prescriptions determined by the Brazilian National Tuberculosis Control Program. It is important to emphasize that the moment for investigation of contacts enables the approximation of family with health professionals and enables the inclusion of family in the treatment of TB patient. The approach of family goes beyond the biological knowledge. It is characterized as a sequence of activities that ranges from the contact at home, orientation about the disease, signs and symptoms, a therapeutic scheme to be followed, using accessible language and details like the kind of drugs, the effects, treatment duration, use benefits, adverse reactions and the consequences of abandoning it (BUFFON, RODRIGUES, 2005; OLIVEIRA et al., 2009).

Table 1: Association between the health services which diagnosed TB and conduct of health professionals for investigation of communicants. João Pessoa, 2009 (n=98).

VARIABLE	SERVICE WHICH DIAGNOSED TB			p
	PCS n (%)	TRC n (%)	SS n (%)	
Searching SR at home				
Never	3 (17.6%)	10 (18.9%)	3 (10.7%)	
Sometimes	0 (0.0%)	2 (3.7%)	0 (0.0%)	
Always	14 (82.4%)	41 (77.4%)	25 (89.3%)	0.5941
TOTAL	17 (100.0%)	53 (100.0%)	28 (100.0%)	
Home visit				
Never	1 (5.9%)	15 (28.3%)	11 (39.3%)	
Sometimes	0 (0.0%)	7 (13.2%)	1 (3.6%)	
Always	16 (94.1%)	31(58.5%)	16 (57.1%)	0.0274
TOTAL	17 (100.0%)	53 (100.0%)	28 (100.0%)	
Evaluation of communicants with BK				
Never	10 (58.8%)	37 (69.8%)	18 (64.3%)	
Sometimes	1 (5.9%)	2 (3.8%)	1 (3.6%)	0.9311
Always	6 (35.3%)	14 (26.4%)	9 (32.1%)	
TOTAL	17 (100.0%)	53 (100.0%)	28 (100.0%)	
Evaluation of communicants with X-Ray				
Never	10 (58.8%)	27 (50.9%)	14 (50.0%)	
Sometimes	1 (5.9%)	9 (17.0%)	1 (3.6%)	0.3215
Always	6 (35.3%)	17 (32.1%)	13 (46.4%)	
TOTAL	17 (100.0%)	53 (100.0%)	28 (100.0%)	
Evaluation of communicants with TST				
Never	16 (94.1%)	48 (90.6%)	22 (78.6%)	
Sometimes	1 (5.9%)	1 (1.9%)	0 (0.00%)	0.1007
Always	0 (0.0%)	4 (7.5%)	6 (21.4%)	
TOTAL	17 (100.0%)	53 (100.0%)	28 (100.0%)	
Talked to the communicants about TB				
Never	7 (41.2%)	25 (47.2%)	13 (48.2%)	
Sometimes	2 (11.8%)	1 (1.9%)	2 (7.4%)	0.5422
Always	8 (47.0%)	27 (50.9%)	12 (44.4%)	
TOTAL	17 (100.0%)	53 (100.0%)	28 (100.0%)	
Talked to the communicants about life conditions				
Never	14 (82.4%)	32 (60.4%)	15 (53.6%)	
Sometimes	0 (0.0%)	1 (1.9%)	1 (3.6%)	0.3846
Always	3 (17.6%)	20 (37.7%)	12 (42.8%)	
TOTAL	17 (100.0%)	53 (100.0%)	28 (100.0%)	

PCS - Primary Care Services (Family Health Units - USF)
TRC- Tuberculosis Reference Center
SS- Specialized Services (Private/General Hospitals, Polyclinics, Private Doctors)
SR- Symptomatic Respiratory
BK- Sputum bacilloscopy
TST- Tuberculin Skin Test

A study developed in São José do Rio Preto – SP indicated insufficient monitoring in the control of communicants. It also indicated that attention focuses on the individual patient, alone, with partial actions about the communicant and little valorization of preventive actions. (GAZETTA et al., 2008). Therefore, home visit would be characterized as a privileged space to the inclusion and family involvement in the care of TB patient, as well as the opportunity to identify new cases (NOGUEIRA et al., 2011). Despite the satisfactory percentage of users cared by PCS mentioned that they received care at home, the use of this resource as a moment of investigation for risk factors is still incipient. The investigation of the life and health conditions of family was considered satisfactory only by 35 (34.6%) interviewees, action predominantly performed by specialized services.

CONCLUSIONS

The performance of the health services in the attention to the communicant of TB cases showed preoccupation in relation to the search for symptomatic respiratory and visits to the house of infected patients. Some aspects need to be emphasized: deficiency in the bacteriological and radiological investigation of communicants, low capacity of the services in the inclusion of family in the therapeutic process of the TB patient. The care of patients with TB transcends the view centered on the disease and implies changes in the paradigms to redirect knowledge and practices in order to achieve the individual in his/her totality. The investigation of suspicious cases cannot be limited to the user who looks for health services. Beyond the home, the health services must assure the quest and identification of suspicious cases in places which concentrate populations more vulnerable of being infected by TB, what does not seem to be an established practice.

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INVESTIGATION OF TUBERCULISIS COMMUNICANTS: PERFORMANCE OF HEALTH SERVICES

The National Tuberculosis Control Program of Brazil, in the intention of detecting tuberculosis cases precociously, has as one of its main attributions the active search for symptomatic respiratory in demand of the health services and in community. Once a case is diagnosed, it should be developed the epidemiological investigation among the communicants of patient. The present study aims to analyze the performance of health services in relation to the investigation of communicants of tuberculosis patients in João Pessoa – PB. It is a sectional study, of quantitative approach. The population of this study was formed by tuberculosis patients, and the sample was constituted by 101 patients. The data were collected by means of primary sources (interviews), using as instrument which was validated and adapted to tuberculosis care in Brazil. Moreover, the statistical treatment used bivariate analysis and chi-square association test (2). It was evidenced that most of cases were diagnosed in the Tuberculosis Reference Center, and the demand for symptomatic respiratory at home was accomplished independent of the kind of health service which diagnosed them. In relation to visit patient at home, Primary Care Service presented the highest percentage of coverage, with 94.1%, becoming evident the association between the variables (p=0.0274). There was no association between the variables which analyzed the evaluation of home contacts with sputum examination (p=0.9311), chest X-ray (p=0.3215) and tuberculin skin test (p=0.1007). The results also showed that there was no association between the variables which evaluate if the heath service that diagnosed tuberculosis talked to the home communicants about the disease (p=0.5422) and about their life conditions (p=0.3846). Considering that the quality of actions directed to tuberculosis communicants may facilitate the early diagnosis of disease, and the compromise of health services is fundamental to overcome the fragilities which are still present.

KEY-WORDS: Tuberculosis; Health Evaluation; Family Health.

L'ENQUÊTE AVEC LES CONTACTS DE TUBERCULOSE: LE RÔLE DES SERVICES DE SANTÉ

Le Programme National du Contrôle de la Tuberculose, visant à detecter précocement les cas de la Tuberculose, a comme l'une des principales attributions: la recherche active des symptômes respiratoires à la demande des services de Santé et de la Communauté. Une fois diagnostiqués les cas, devrait suivre l'investigation épidemiologique entre les contacts familiaux du patient. Analyser la performance, le rôle des services de santé quant à l'enquête sur les contacts des patients tuberculeux dans la Ville de João Pessoa-PB. Une étude sectionnelle sur l'abordage quantitatif. La population d'étude était composée des patients tuberculeux dont l'échantillon constitué par 101 malades. Les données ont été réceuillies aux moyens des sources primaires, en utilisant un instrument validé et adapté aux soins de la Tuberculose au Brésil. Le traitement statistique a été basé sur l'analyse bivariée et sur test d'association Chi-carré (C2). Il a été constaté que la plupart des cas étaient diagnostiqués en soins specialisés, étant donné que la recherche des symptômes respiratoires à domicile était realisée de façon independente du type de service de santé ayant diagnostiqué. Quant à la visite domiciliaire du patient, le plus grand pourcentage de couverture soit 94,1% était representé par les soins primaires, mettant en évidence l'association entre tant d'autres (p= 0,0274). Il n'y a pas eût d'association parmi plusieurs, qui puisse analyser l'évaluation des contacts domiciliaires avec examen des expectorations (p=0,9311), de la Radiographie thoracique (p=0,3215) et du test Tuberculinique (p=0,1007). Aussi, l'absence d'association parmi tant d'autres qui évaluent si le service de santé a parlé avec les contacts familiaux sur la tuberculose (p=0,5422) et sur leurs conditions de vie (p=0,3846). L'effectivité des actions relatives aux contacts de la Tuberculose peut favoriser ou faciliter le diagnostic précoce de la maladie, étant donné que l'engagement des services de santé pour surmonter les fragilités encore présentes demeure fondamental.

MOTS-CLÉS: Tuberculose; l'évaluation de la Santé; Santé familiale.

INVESTIGACIÓN DE LOS CONTACTOS DE TUBERCULOSIS: RENDIMIENTO DE LOS SERVICIOS DE SALUD

El Programa Nacional de Control de la Tuberculosis objetiva realizar la localización de casos en forma precoz y tiene como una de sus principales tareas la búsqueda activa de los sintomáticos respiratorios en la demanda de los servicios de salud y en la comunidad en especial de la investigación epidemiológica entre los contactos del paciente. Analizar el rendimiento de los servicios de salud en la investigación de los contactos de pacientes con tuberculosis en la ciudad de João Pessoa-PB. Se diseñó un estudio seccional con un enfoque cuantitativo. La población del estudio fue compuesta por pacientes con tuberculosis, con una muestra de 101 pacientes. Los datos fueron recolectados a través de fuentes primarias, utilizando un instrumento validado y adaptado a la atención de la tuberculosis en Brasil. El análisis estadístico se basó en el análisis bivariante y test de asociación del chi-cuadrado (c2). La mayoría de los casos fueron diagnosticados en el dispensario especializado, y la búsqueda de los sintomáticos respiratorios se llevó a cabo en el hogar, independientemente del diagnóstico hecho por los servicios de salud.

Para la visita del paciente en su domicilio, la atención primaria presentó un mayor porcentaje de cobertura con 94,1%, mostrando una asociación entre las variables (p = 0,0274). No se encontró asociación entre las variables que analizan la evaluación de los contactos familiares con el del esputo (p = 0,9311), radiografía de tórax (p = 0,3215), prueba de la tuberculina (p = 0,1007). No se encontró una asociación entre las variables utilizadas para evaluar si los servicios de salud habló con los contactos domiciliares sobre la tuberculosis (p = 0,5422) y sobre sus condiciones de vida (p = 0,3846). La eficacia de las acciones dirigidas a los contactos puede facilitar el diagnóstico precoz de la enfermedad, siendo fundamental a los servicios de salud el compromiso para superar las deficiencias aún presentes.

PALABRAS-CLAVE: Tuberculosis; Evaluación en Salud; Salud de la Familia.

INVESTIGAÇÃO DE COMUNICANTES DE TUBERCULOSE: DESEMPENHO DOS SERVIÇOS DE SÁUDE

O Programa Nacional de Controle da Tuberculose, visando detectar precocemente os casos de tuberculose, tem como uma das principais atribuições a busca ativa de sintomáticos respiratórios na demanda dos serviços de saúde e na comunidade. Uma vez diagnosticados os casos, deve-se seguir a investigação epidemiológica entre os comunicantes do doente. O estudo teve como objetivo, analisar o desempenho dos serviços de saúde quanto à investigação de comunicantes de doentes de tuberculose no município de João Pessoa-PB. Estudo seccional, de abordagem quantitativa. A população do estudo foi composta pelos doentes de tuberculose, sendo a amostra constituída por 101 pacientes. Os dados foram coletados por meio de fontes primárias (entrevistas), utilizando-se um instrumento, validado e adaptado para atenção à tuberculose no Brasil. O tratamento estatístico baseou-se em análise bivariada e teste de associação do qui-quadrado (2). Constatou-se que a maior parte dos casos foram diagnosticados no Ambulatório de Referência para Tuberculose, sendo que a procura por sintomáticos respiratórios no domicílio foi realizada independente do tipo de serviço de saúde que diagnosticou. Quanto à visita no domicilio do doente, a Atenção Básica apresentou maior percentual de cobertura com 94,1%, evidenciando-se associação entre as variáveis (p= 0,0274). Não houve associação entre as variáveis que analisam a avaliação dos comunicantes domiciliares com exame de escarro (p=0,9311), RX de tórax (p=0,3215) e teste tuberculínico (p=0,1007). Não houve associação entre as variáveis que avaliam se o serviço de saúde que diagnosticou a doença conversou com os comunicantes domiciliares sobre a tuberculose (p=0,5422) e sobre suas condições de vida (p=0,3846). Conclui-se que a efetividade das ações voltadas aos comunicantes de tuberculose pode favorecer o diagnóstico precoce da doença, sendo fundamental o compromisso dos serviços de saúde para superar as fragilidades ainda presentes.

PALAVRAS-CHAVE: Tuberculose; Avaliação em Saúde; Saúde da Família.