Abstract

This study aimed to describe tuberculosis control actions in the context of Family Health Teams, regarding the dimensions family focus and community orientation. A cross-sectional evaluative research was carried out in 2008, with 84 healthcare workers. The Primary Care Assessment Tool was used, validated and adapted to assess tuberculosis care in Brazil. Respondents answered each question according to a pre-determined scale, (Likert's scale) ranging from zero to five. Data were tabulated using the Statistical Package for the Social Sciences software and were analyzed according to frequency and median. In the first dimension, outcomes revealed that 67.9% of health workers evaluate contact cases with diagnostic tests; 63.1% use radiology tests; 64.3% include the household to face the disease; 77.4% identify risk factors; 41.7% interface with other sectors to find solutions for the identified problems. In the second dimension, 73.8% of them perform case search; 40.5% provide inputs for sputum collection; 50% take educational actions in the community; 14.3% recognize social participation in tuberculosis control. Therefore, the efficiency of such services requires taking actions that give special attention to family and community, and the development of skills to create new spaces for professionals to act and to strengthen the interface with other sectors of society.

Keywords: Tuberculosis. Primary Health Care. Health Services Evaluation. Family Health. Health Policy. Family.
Resumo

Este estudo objetivou descrever as ações de controle da tuberculose no contexto de Equipes de Saúde da Família, segundo as dimensões “enfoque familiar” e “orientação para comunidade”. Pesquisa avaliativa seccional, realizada em 2008, que envolveu 84 profissionais de saúde. Utilizou-se o instrumento Primary Care Assessment Tool, validado e adaptado para atenção à tuberculose no Brasil. Os entrevistados responderam as questões segundo possibilidades produzidas por escala intervalar tipo Likert, à qual foi atribuído um valor entre zero e cinco. Os dados foram inseridos no programa Statistical Package for the Social Sciences e analisados segundo frequência e mediana. Na primeira dimensão avaliada, 67,9% dos profissionais de saúde investigam os contatos domiciliares dos casos de tuberculose; 63,1% realizam exame radiológico; 64,3% incluem a família no enfrentamento da doença; 77,4% identificam fatores de riscos; 41,7% envolvem outros setores na resolução dos problemas. Na segunda dimensão, 73,8% realizam busca de casos na comunidade; 40,5% dispõem de insumos para coleta de escarro; 50% desenvolvem trabalhos educativos e 14,3% reconhecem participação social no controle da tuberculose. A eficiência da utilização dos serviços exigirá a incorporação de ações que privilegiam a atenção à família e à comunidade, e o desenvolvimento de habilidades que ampliem os espaços de atuação dos profissionais e fortaleçam a articulação intersetorial.


Introduction

The increase in poverty and social inequality excludes the majority of the population from having access to minimum conditions of dignity and citizenship, requiring the reevaluation of traditional approaches that guide health care models. The interaction among patients, health professionals and the community, in addition to the approach to the family, during the health care process, must be emphasized to guarantee comprehensive and effective care.

The family is not only the strongest affective bond among individuals, but also the basis of their social identity and material and spiritual survival, through which their way of life is constructed. In this perspective, health sector reforms bring back their focus to the family dynamics and nucleus, based on the implementation of the Estratégia Saúde da Família (Family Health Strategy), aiming to enable more egalitarian and inclusive access to marginalized groups, who are extremely vulnerable to health problems resulting from precarious living conditions, such as tuberculosis (TB).

With regard to TB, Brazil comes in 19th place among the 22 countries with the highest burden of this disease, reporting 94,000 new cases yearly. The difficulty in reducing the incidence or even the eradication of TB is related to the increase in social problems such as low family income, poor education, inadequate housing conditions, malnourishment, alcoholism and associated infectious diseases. Other factors pointed out as aggravations refer to the growth of marginalized populations, the HIV/AIDS epidemic, multi-drug resistance, population aging and migratory movements. In addition, the following aspects further aggravate this situation: the health system organization and quality, which compromises access to health services; the failure in the distribution of anti-tuberculosis drugs; and the lack of qualified personnel to diagnose, record and follow TB patients.

To identify the user as an individual belonging to a certain family nucleus, included
in a specific socio-cultural context, is relevant to provide comprehensive health care, once the definition of comprehensiveness is in agreement with the broadened concept of health, i.e. with the view of health as a portrait of people’s ways of life7. The inclusion and involvement of the family in caring for a TB patient initially require that the health team be aware of the family dynamics and structure, so that they can jointly establish a co-responsible therapeutic project.

To achieve this, the decentralization of TB control actions to the primary care level has led to interventions that cover collective care. The current health care model, still centered on the individual, needs to broaden its prevention and promotion actions towards the family social environment, because advances in planning and development of therapeutic interventions can be achieved through this8.

The establishment of new dimensions, such as the focus on the family and guidance on primary care services for the community, is necessary to promote changes in quality and to emphasize the commitment and involvement among health professionals, the individual, family and community1.

Considering the relevance of TB in the sphere of Primary Health Care, this study aimed to evaluate the fulfillment of the “family focus” and “community orientation” dimensions, in terms of TB control actions developed in the context of Equipes de Saúde da Família (ESF – Family Health Teams) of the city of Bayeux, in the state of Paraíba (PB), Brazil.

Material and Methods

A cross-sectional study was conducted in Bayeux, a small city situated in the metropolitan region of João Pessoa, PB, selected by the Brazilian Ministry of Health as a priority to fight tuberculosis. In the context of primary care, this city has 28 ESF distributed in five Distritos Sanitários de Saúde (Sanitary Health Districts), being responsible for the coverage of 92% of the population.

The study population was comprised of doctors, nurses, nursing technicians and community health agents (CHA), who integrated the city’s ESF. Considering the fact that the composition of these teams is variable in terms of the distribution of CHA (n>1), the selection of this category was previously recommended by a nurse, according to the criterion of knowledge about the field of research and time of work (>two years as a CHA). Of all the 112 professionals initially expected, 84 were investigated. It should be emphasized that the losses occurred do not invalidate the results obtained.

A structured questionnaire, developed by Macinko and Almeida8 and adapted and validated by Villa and Ruffino10, was used to collect data, including indicators of evaluation of TB control actions according to primary health care aspects. This questionnaire was divided into eight sections, of which two referred to the “family focus” and “community orientation” dimensions, used in the present study. The “family focus” dimension presupposes the importance of an individual in their routine environment, once the evaluation of health needs must consider the family context and any types of threats to health, in addition to dealing with the challenge of limited family resources11. The following variables were considered to analyze this aspect in the context of TB: “organization of medical records per family nucleus”, “performance of tests to investigate TB in all family members”, “X-ray performed in contacts, if necessary”; “family involvement in the treatment”, “investigation of risk factors and life conditions”; and “sector interaction”.

The “community orientation” dimension implies the recognition that all population health needs occur in a certain social context, which should be known and considered 11. This dimension connects clinical medicine, epidemiology and social sciences, relying on the support of research and service participation to define and characterize the community, identify the population health problems, change programs according to the needs, and evaluate the changes made.
The following variables were considered to analyze this aspect: “interview with patients cared for in the unit to find out whether the services provided meet the health needs perceived by them”, “search for individuals with respiratory symptoms of TB in the community”, “home visit to identify individuals with respiratory symptoms of TB”, ”work or interact with other institutions to identify these individuals”, “offer of a spittoon to all individuals with a cough who are present in the unit/community”, “advertising/campaigns and educational projects being performed to inform the community about TB”, and “participation of one community representative in the TB control strategy”.

Participants responded to each interview question, following a pre-established scale of possibilities, the Likert scale, to which a value was attributed according to the possibilities of responses: 1 (never); 2 (almost never); 3 (sometimes); 4 (almost always); 5 (always) and 88 (did not respond).

Data were input into the Statistical Package for the Social Sciences software (SPSS, version 11.5 for Windows) and statistically analyzed, considering absolute and relative values for each variable studied. This was subsequently analyzed, based on a measure of central tendency: the median. The use of the median was the choice, because it is not influenced by extreme values. Each indicator investigated was ordered, and the value that was found in the central position of the analyzed group was identified. “Family focus/community orientation” was categorized as “not satisfactory” when values were close to 1 or 2; “fair”, when close to 3 or 4; and “satisfactory”, when close to 5.

This research project was approved by the “Comitê de Ética em Pesquisa do Centro de Ciências da Saúde da Universidade Federal da Paraíba” (Paraíba Federal University Health Sciences Center Research Ethics Committee), under protocol 886/07. Authors declared there were no conflicts of interest during the development of this study.

**Results**

Of all 84 health professionals analyzed, 17 (20.23%) were doctors, 22 (26.19%) were nurses, 23 (27.38%) were nursing technicians and 22 (26.19%) were community health agents.

Figure 1 shows the distribution of frequency of responses related to health care provided to TB patients and their family members by health professionals. Findings show that 92.8% of the health professionals interviewed organize medical records while considering the family nucleus. With regard to TB investigation in home contacts, only 67.9% of interviewees reported “always” performing such procedure, and 63.1% do this by having a radiological test performed. In terms of the inclusion of family members in the therapeutic process of a patients diagnosed with TB, 64.3% “always” involve the family to cope with the disease.

With regard to the investigation of living conditions of TB patients, 77.4 % of participants “always” ask the patient about social risk factors (unemployment, availability of drinking water, and basic sanitation, among others). However, performing interventions based on the information gathered does not seem to be an ESF practice. Only 41.7% of all professionals “always” seek to promote integration with other sectors, aiming to find solutions to the social problems identified. It is relevant to point out that 7.1% and 8.3% of professionals did not give their opinion about these two indicators, respectively.

Figure 2 shows that only 34.5% of ESF professionals seek to evaluate the service offered to TB patients, 15.5% never question this and 17.9% do so sporadically. When it comes to the search for individuals with respiratory symptoms in the community, 73.8% mentioned that they “always” perform such procedure. However, when asked about the circumstances in which this investigation occurs, only 52.4% do this during the home visit.

With regard to the search for individuals with respiratory symptoms in places with fast dissemination of the disease (shelters,
homes, prisons, mental institutions), 21.4% of professionals reported they developed this action in institutions situated in their area, in contrast with the high percentage (43.8%) of sum of values corresponding to “never”, “almost never” and “sometimes” responses.

When it came to services providing a spittoon to individuals with respiratory symptoms seeking health services, so that phlegm could be collected, only 40.5% provide this regularly (the Brazilian Ministry of Health recommends 100%).

With regard to the educational projects aimed at the community, 52.4% of participants indicated that they “always” adopt this practice. Low social representativeness was found for participation of a community representative in the TB control strategy. Higher percentages were observed in the “never” option, totaling 41.6%. The “always” option was indicated by 14.3% of participants, while 16.7% did not respond.

Figure 3 shows the variables studied, according to the median values found for the “family focus” dimension. Among the six variables investigated, only “sector interaction” showed a score lower than 5. The remaining variables showed values considered satisfactory. It should be emphasized that the “investigation of TB in family members” and “X-ray performed in contacts, if necessary” and “family involvement with the patient’s treatment” variables showed satisfactory median values. However, in the percentage analysis (Figure 1), performance was lower than 70%. It should be expected, as an ESF attribution, that all family mem-


Figure 1 - Percentage distribution of the answers of the Family Health Team according to family focus variables. Bayeux, PB, 2008.

bers (100%) were investigated when a TB case was diagnosed.

With regard to the median values found for the “community orientation” aspect (Figure 4), of all seven variables studied, only three achieved satisfactory median values (equal to 5). Although the “search for individuals with respiratory symptoms in the community” variable achieved a score of 5, “offer of a spittoon for phlegm to be collected” showed an average performance (value equal to 4), thus compromising the “health care comprehensiveness” aspect. In terms of “participation of a community representative in the TB control strategy”, the median value found (equal to 1) indicates lack of social inclusion in the system management, as recommended by the Sistema Único de Saúde’s (SUS – Unified Health System) strategies and expectations.

Discussion

The organization of medical records per family nucleus is characterized as one of the practices of the ESF studied. However, it should be noted that this resource should not gather information exclusively. Organizing TB patient care requires the acquisition of such information, the understanding of the contextual dynamics of these individuals and inclusion of the family in the development of a different therapeutic project.

It should be emphasized that the mo-
When contacts are investigated, it enables the family to come closer to the ESF and provides the opportunity of including family members in the treatment of TB patients, an indicator which is evaluated as satisfactory by only 64.3% of interviewees.

The health professional plays an important role in the patient’s adherence to the treatment. However, family involvement is key to cope with the disease, because it influences the adoption of habits, styles and behaviors that are relevant for the therapeutic process.
to succeed. Individuals see the family as their “closer stage where they find values, interpretations, perceptions, behavior models, guidance, protection against the daily challenges of life and the processes associated with health, well-being and disease”\textsuperscript{13}.

Both the patient and their family members must be guided by health professionals on the disease characteristics and therapeutic scheme to be followed, using accessible language and details such as drug types, effects, treatment duration, benefits of use, adverse reactions, results of abandonment and their opinion\textsuperscript{14}. In addition, there is the need to investigate risk factors (intrinsic and extrinsic) that can be determining the occurrence of the disease and interfering with therapeutic adherence.

Out of a set of factors that can be pointed out, three should be emphasized. The first group represents factors associated with an individual’s preferences, involving habits such as smoking, legal and illegal drug use and physical inactivity, among others. Exogenous factors comprise the second group, represented by genetic diseases, accidents and other causes resulting from the life cycle. The third group, in its turn, is determined by the socioeconomic situation, which creates great social inequalities\textsuperscript{15}. It is well-known that low-income individuals, living in heavily populated urban areas with large families, and experiencing poor housing and educational conditions, are more vulnerable to \textit{Mycobacterium tuberculosis} infection, apart from their seeking diagnosis and intervention at a later time\textsuperscript{15}.

Although a satisfactory percentage of participants (77.4\%) mentioned they investigated the social conditions of TB patients, the use of such information as a resource that promotes integration with other sectors is incipient. It is essential to realize that effective responses in the health sector depend on social interactions and actions coordinated by different sectors\textsuperscript{16}. Problems associated with occurrence of TB show a diversity of determinations, causing resolution proposals to be based on multiple strategies, measures and participants that integrate preventive and care actions. If, on the one hand, they require the fulfillment of prescribed technical actions (home visit/active search for individuals with respiratory symptoms/diagnostic tests/educational activities), on the other hand, they also propose the inclusion of other social segments.

With regard to the technical actions, the home visit does not largely consist in an ESF working tool that provides the opportunity to identify respiratory symptoms. Home visit is an attribute provided for by the ESF and it should subsidize interventions based on the direct observation of the reality of the community\textsuperscript{17}. Investigations of suspected cases cannot be limited to the user who seeks a health service. In addition to the home, the ESF should guarantee the search for and identification of suspected cases in places that concentrate populations with greater vulnerability to TB, although this does not seem to be an established practice yet.

In this context, it should be emphasized the need for ESF/services to develop abilities that enable the recognition of the adequacy of “availability” to the specific context in which the individual/family/team meet. According to the variables investigated, it is observed that the availability of services is not based on the identification of the health needs of the population cared for. The biological, economic, social and cultural dimensions determine the beginning of the health needs. Actions that guide health services should be developed from such needs. This relationship between health needs and actions implies the evaluation of the ability of the practices provided to change the state in which individuals find themselves, whether meeting the health needs or not\textsuperscript{18}.

Although evaluation is a key part of activity planning, in practice, it is not established as an instrument that manages and promotes decision-making. Among the professionals analyzed, only 34.5\% reported asking users to evaluate the service provided. It would be essential to follow the effects of interventions, to know the way users perceive the health care provided and to evaluate health actions. Such measures
would imply a reorganization of the network of powers and work processes, so that health professionals/community were encouraged to follow new autonomy and responsibility standards. With regard to the educational projects aimed at the community, the results found suggest a small participation of more dynamic means of communication to inform this community about the TB problem. The role of the media to disseminate information and warnings to prevent and fight TB is important. Social means of communication should explore not only publications of an informative nature, but also those that demand and promote changes, requiring effective attitudes from health managers.

In view of the legitimacy and representativeness of the theme, it is necessary to promote dialogue and an intersectoral approach for the advancement of TB policies. The participation of representatives of communities affected by this problem is unquestionable and essential to obtain sustainable policies and actions on behalf of the population itself. In general, popular participation consists in different actions developed by multiple social forces to contribute to the construction, implementation, inspection and evaluation of public policies or basic services in the social area: health, housing, basic sanitation, transportation and education, among others.

Although being a recent inclusion, the public power's recognition of the community has brought into the political context a determining participant in the process of coping with TB, and it is estimated that the fight against this disease has a promising future. However, popular inclusion and participation in the decision-making processes is still incipient. The results of this study show low social representativeness, revealing that participation of such individuals has not been legitimized in the context of ESF work.

Stimulating civil society's involvement leads to the strengthening of management, as it enables transparency, legitimacy and co-responsibility. Thus, it is the health managers’ responsibility to emphasize and increase the community's ability to act, using the necessary means and resources, without waiting for this to occur spontaneously.

**Final Considerations**

This health care approach aimed at the family nucleus/community did not have the purpose of thoroughly dealing with this theme. On the contrary, it is expected that the importance of including such groups in health care, following a more understanding and broader view, can be included in health services, so that ESF performance is strengthened, enabling greater care resolvability.

It should be emphasized that, although a significant number of participants mentioned identifying risk factors, the promotion of integration with other sectors, aiming to seek solutions to the social problems identified, does not yet seem to be a practice of such professionals. In this sense, caring for a TB patient goes beyond the disease-centered view and implies changes in paradigms to give a new direction to knowledge and practices, so that an individual is approached completely. TB control requires integration among health services and interactions with other public sectors, aiming to reduce the limitations of health care actions that are mainly hindered by each individual's socioeconomic conditions.

It is necessary to promote an intersectoral approach, in addition to triggering and stimulating civil society's dialogue and involvement. The participation of representatives of communities affected by this problem is unquestionable and essential, aiming to obtain sustainable policies and actions on behalf of the population itself.
References


Received: 19/01/10
Final version: 28/10/10
Approved: 12/11/10