



Journal of Nursing

Revista de Enfermagem

UFPE On Line

ISSN: 1981-8963

ORIGINAL ARTICLE

THE COORDINATION OF ASSISTANCE IN TUBERCULOSIS CONTROL IN THE NURSING TEAM'S VIEW

A COORDENAÇÃO DA ASSISTÊNCIA NO CONTROLE DA TUBERCULOSE NA VISÃO DA EQUIPE DE ENFERMAGEM

LA CORDINACIÓN DE LA ASISTENCIA EN EL CONTROL DE LA TUBERCULOSIS EN LA VISIÓN DEL EQUIPO DE ENFERMERÍA

Janaina Benatti de Almeida¹, Maria Amélia Zanon Ponce², Anneliese Domingues Wysocki³, Maria de Lourdes Sperli Geraldês Santos⁴, Silvia Helena Figueiredo Vendramini⁵

ABSTRACT

Objective: to analyze the coordination of care for tuberculosis patients by the nursing team. **Method:** this is an epidemiological study, descriptive, and survey, analytical and transversal type. There were 79 nursing professionals interviewed with a pre-structured form, and the data were analyzed using descriptive analysis techniques and the T-Student test for independent groups. **Results:** Nurses classified care coordination as more effective than nursing assistants/technicians, there were statistical differences between categories, especially information systems. **Conclusion:** Coordination of tuberculosis care is still fragile, and individual efforts of the team and municipal politicians are needed to achieve coordinated tuberculosis care. **Descriptors:** Nursing Team; Health Management; Process Assessment (Health Care); Health Care Evaluation Mechanisms; Tuberculosis.

RESUMO

Objetivo: analisar a coordenação da assistência aos portadores de tuberculose pela equipe de enfermagem. **Método:** estudo epidemiológico, descritivo tipo inquérito, analítico e transversal. 79 profissionais de enfermagem foram entrevistados com formulário pré-estruturado e os dados foram analisados com técnicas de análise descritiva e o teste T-Student para grupos independentes. **Resultados:** os enfermeiros classificaram a coordenação da assistência mais efetiva que os auxiliares/técnicos de enfermagem, houve diferença estatística das opiniões entre as categorias, principalmente sobre sistemas de informação. **Conclusão:** a coordenação da assistência à tuberculose ainda é frágil e são precisos esforços individuais da equipe e políticos municipais para que seja atingida a assistência coordenada da tuberculose. **Descritores:** Equipe de Enfermagem; Gestão em Saúde; Avaliação de Processos (Cuidados de Saúde); Mecanismos de Avaliação da Assistência à Saúde; Tuberculose.

RESUMEN

Objetivo: analizar la coordinación de la asistencia a los portadores de tuberculosis por el equipo de enfermería. **Método:** estudio epidemiológico, descriptivo tipo inquérito, analítico y transversal. 79 profesionales de enfermería fueron entrevistados con formulario pre-estructurado y los datos fueron analizados con técnicas de análisis descriptiva y el test T-Student para grupos independientes. **Resultados:** los enfermeros clasificaron la coordinación de la asistencia más efectiva que los auxiliares/técnicos de enfermería, hubo diferencia estadística de las opiniones entre las categorías, principalmente sobre sistemas de información. **Conclusión:** la coordinación de la asistencia a la tuberculosis aún es frágil y son precisos esfuerzos individuales del equipo y políticos municipales para que sea afectada la asistencia coordinada de la tuberculosis. **Descritores:** Grupo de Enfermería; Gestión en Salud; Evaluación de Proceso (Atención de Salud), Mecanismos de Evaluación de la Atención de Salud; Tuberculosis.

¹Nurse, Master's in Nursing, Faculty of Medicine of São José do Rio Preto/FAMERP. São José do Rio Preto (SP), Brazil. E-mail: janab Almeida@gmail.com; ²Nurse, PhD in Health Sciences, EERP / USP, member of GEOTB / REDE-TB. São José do Rio Preto (SP), Brazil. E-mail: amelinha_famerp@yahoo.com.br; ³Nurse, Federal University of Mato Grosso do Sul, Campus of Três Lagoas-MS. Graduation course in nursing, Brazil. E-mail: lilisew@yahoo.com.br; ⁴Nurse, Ph.D. Professor, Faculty of Medicine of São José do Rio Preto/FAMERP. São José do Rio Preto (SP), Brazil. E-mail: mlsperli@gmail.com; ⁵Nurse, Ph.D. Professor, Faculty of Medicine of São José do Rio Preto (FAMERP), São José do Rio Preto (SP), Brazil. E-mail: silviahve@gmail.com

INTRODUCTION

The concept of Health Care Networks (RAS) tries to redefine how health care is organized, characterized as a polierarchical formation of a set of services, with a unique mission, common objectives and cooperative and interdependent, coordinated by the Basic Care (AB) in which the points of attention are related horizontally and are equally important.¹ As a coordinator of HCN, the BC needs to be able to ensure continuity of care to the patient in the health system, ensuring the provision of inputs, resources, the flow of information of users and articulating intra and extrasetorially.^{2,3}

In care for Tuberculosis (TB), care coordination is essential, since the main problem is not the way of detection and treatment, but rather how services organize to do them.² The nursing team has an essential role for achieving the effective coordination of care, since in the daily practice of TB control actions, both health and administrative and management activities are carried out.

In this context, the centralization of actions in the nurse is highlighted, being the main responsible for maintaining the articulation with the various points of TB care, centralized in activities of monitoring, control, and information system, generating overload and even decrease the quality and resolution of the care and inefficiency of this coordination.⁴⁻⁶

As the nursing team is most involved in aspects related to the coordination of TB care, it is essential to use it as a study population, since it allows a comprehensive view of the potentialities and fragilities of the process of integrating actions and services, and if effective, they enable to control and combat Tuberculosis, a health problem still prevalent and difficult to control. Therefore, this study aims to analyze the coordination of care for tuberculosis patients by the nursing team.

METHOD

A cross-sectional, analytical, cross-sectional, epidemiological study was carried out, titled *"Tuberculosis: analysis of the bottlenecks of care for disease control in municipalities in the South, Southeast and Northeast of Brazil"* (CNPq) Process number: Call MCTI/CNPq/MS-SCTIE-Decit Nº 40/2012 - Research on Neglected Diseases and FAPESP process number: 2013/22512-3), and São José do Rio Preto, São Paulo, Brazil was a member.

The municipality has a population of 408,258 inhabitants⁷ and the health system is composed of 11 Basic Health Units (UBS) and 15 Basic Units of Family Health (UBSF). Family Health Strategy coverage (ESF) was 28% in 2013.⁸

The actions of the TB program have been decentralized to BC's health services since 2008 and have a reference team responsible for TB control actions in each Health Unit of the Municipality. This team was established by the Tuberculosis Control Program (PCT), consisting of 1 physician, 1 nurse, and 1 nursing assistant/technician.

After diagnosis and initiation of treatment, the patient with the disease is followed up by the Health Service within the coverage area and performs the Directly Observed Treatment (TDO) three times a week, preferably at the Health Service or at home (in case of Impossibility of attending the service due to physical immobility or non-adherence to treatment). Extrapulmonary cases, recurrences, retreatment, co-infection and drug resistance or another specific aspect of complexity are referred to the specialized services, such as 01 Tuberculosis and Leprosy Outpatient Clinic - ATH and 01 Specialized Care Service - SAE (reference for TB/HIV).

In the Tuberculosis and Leprosy Outpatient Clinic (ATH), the actions of the Tuberculosis Control Program (PCT) are also developed, sharing the same physical structure and team, which performs both special assistance actions and technical support to health services and Epidemiological Surveillance actions (VE).

Communication between services (referral of cases, scheduling of appointments) takes place by reference guide and counter-reference, as well as telephone calls that according to the flow established by the service management, they must be registered in medical records.

There are also quarterly meetings between the Local Health Department and TB reference team of the Health Units to discuss cases and, most of the time; only there is only the presence of the nurse, which is justified by the overload of work of the other professionals in the services. Also, local team meetings take place in the Health Services, daily or weekly, for the same purpose. Institutional visits are made to each Health Service by the PCT team once a year, aiming at the analysis of the quality of the actions and services of the reference team of the Health Units.

A pre-structured observation script was developed and elaborated to describe the scenario in this study according to the basic

Almeida JB de, Ponce MAZ, Wysocki AD et al.

requirements for care of TB patients described in the Manual of Guidelines for Tuberculosis Control.⁹

The study population consisted of nurses, nursing assistants and technicians who worked in the 26 AB Services and the two specialized health services (ATH and SAE). Professionals who were members of the reference team responsible for TB control actions in the Health Units were selected for the study, as well as those professionals who had already followed up a case of TB during their work who accepted to participate in the study, by signing the Informed Consent Free Term (ICLE). Professionals who never attended TB patients were excluded from the study.

The sampling process was done for convenience involving all who accepted to participate. Two nursing assistants refused to participate, and they were replaced by new key informants, the final sample being 79. Data collection occurred from September 2013 to February 2014.

There were interviews conducted with the form proposed by MacCooll Institute for Health Care Innovation, adapted and validated in Brazil by Moyses¹⁰, for the “evaluation by professionals of the local institutional capacity to develop the model of attention to chronic conditions” and to support the teams to improve care for these conditions in the community and services, and in the relationship with the users. This form was adapted for TB care based on the recommendations of the Manual of Guidelines for Tuberculosis Control⁹, containing 36 components divided into seven evaluative dimensions: I - Organization of TB care, II - Community articulation, III - Self-care supported, IV - Decision support, V - Design of the service delivery system, VI - Clinical information systems and VII - Integration of the components of the care model for people with TB.

The capacity for coordination of TB care was assessed by the dimensions and their components, using a Likert scale, scored from 0 to 11, with 0 being the worst TB care capacity and 11 being the best score. According to the score attributed by the professional, the answers could be qualified as follows:

- Optimum Capacity: average between 9 and 11 points - LEVEL A;
- Reasonable capacity: average between 6 and 8 - LEVEL B;
- Basic Capacity: average between 3 and 5 - LEVEL C;

The coordination of assistance in tuberculosis...

- Limited Capacity: average between 0 and 2 - LEVEL D.

The average of the scores attributed to each component was used to establish the classification of AB services capacity for TB control in each evaluative dimension.

The collected data were entered, stored and analyzed using the Statsoft program, version 10.0 of Statsoft, using descriptive data analysis techniques (mean and standard deviation - SD) and Student's T-test for independent groups with a confidence interval of 95%.

The research project was submitted to the Ethics, and Research Committee of the Medical School of São José did Rio Preto - FAMERP and approved under opinion N° 313.199, in compliance with the recommendations of the Resolution 466/12 of the National Health Council.

RESULTS

A total of 79 nursing professionals were interviewed, of which 23 nursing assistants or technicians (29.1%) and 56 nurses (70.9%) were interviewed. Nursing auxiliaries or technicians had more time in service than nurses, with a mean of 6.3 years (SD = 5.2), while nurses had 1.7 years on average (SD = 1.8).

After analyzing the coordination of TB care by the professional categories of the nursing team, a statistically significant difference was observed between nurses and nursing technicians/assistants in the role of the Local Health Council in the care of TB patients ($p=0.025$), to the reception of the concerns of TB patients and their families ($p=0.007$), in which nurses analyzed the capacity of the team as the best.

In Dimension IV - Decision support, a significant difference was observed in almost all the components, except in the Information to people component on TB. Regarding the return of information from TB patients, the counter-reference, it was verified that the nurses classified this one as more effective than the nursing technicians/assistants, in which there was a significant difference between the respondents ($p=0.029$). All the results according to professional category and evaluative dimensions are described in Tables 1 and 2.

Table 1. Analysis of Coordination of Assistance to TB patients according to TB Care Organization, Community Articulation, Supported Self-Care and Decision Support by professional category, São José do Rio Preto (2013-2014)

Evaluative Dimension	Nurse		Nursing Assistant/Technician		p
	Average	SD	Average	SD	
I - Organization of TB care	7.8	1.8	7.6	1.1	0.667
Interest of the Health Service Manager regarding changes in TB care	8.9	2.8	8.6	1.8	0.604
Goals agreed and registered by the Health Service for the control of TB in the coverage area	8.9	3.3	7.2	3.7	0.053
Strategies to improve TB care	9.6	2.2	10.0	1.5	0.493
Strategies for Primary Health Care to be the place for TB treatment	8.4	1.7	7.9	2.2	0.258
Participation of the manager of the Health Service to improve TB care	7.5	2.7	8.4	1.4	0.136
Benefits and incentives to TB patients	3.4	3.8	3.5	3.7	0.947
II - Articulation with the community	4.8	2.8	3.8	2.9	0.168
Articulation of the Health Service and TB carriers with community organizations	3.5	4.0	1.8	3.5	0.110
Partnerships with community organizations to control TB	3.0	3.4	1.9	3.3	0.245
Council/Local Health Commission	4.7	3.0	2.8	2.0	0.025
Community Health Agent	8.3	3.5	7.5	3.7	0.356
III - Self-care supported	7.4	1.9	6.4	2.4	0.067
Records related to the support of professionals in the Health Service for the TB carrier take care of their health	6.4	2.7	5.6	3.1	0.301
Support for TB patients to take care of their health	6.6	4.3	4.9	4.1	0.122
Addressing concerns of TB patients and their families	9.4	1.4	7.9	3.1	0.007
Behavior change interventions of TB patients	7.2	2.5	7.5	1.4	0.532
IV - Decision support	8.4	1.7	6.6	2.1	< 0.001
Manual of guidelines for the control of TB in the Health Unit Service	10.2	1.3	7.6	4.0	<0.001
Involvement of TB specialists who are not part of the team in supporting	8.6	2.9	6.9	3.2	0.032
Training of health professionals to care for TB	5.6	3.0	3.5	3.2	0.008
Information to people about TB	9.0	2.2	8.5	2.3	0.321

Key: Optimum Capacity: average between 9 and 11 points - LEVEL A; Reasonable capacity: average between 6 and 8 - LEVEL B; Basic Capacity: average between 3 and 5 - LEVEL C; Limited Capacity: average between 0 and 2 - Level D.

Table 2. Analysis of the Coordination of Assistance to the TB carrier according to the Design of the Service Delivery System, Clinical Information System and Integration of the Components of the Attention Model for people with TB by professional category, São José do Rio Preto (2013-2014)

Dimensão Avaliativa	Nurse		Nursing Technician/Assistant		p
	Average	SD	Average	SD	
V - Design of the service delivery system	7.6	1.3	7.2	1.6	0.259
1. Teamwork for TB control	7.1	1.8	6.8	2.2	0.635
2. Health Professional of the Service that is a reference for the development of TB control actions	8.2	2.5	7.3	3.12	0.216
3. Schedule system for the treatment of TB	8.0	2.2	8.0	1.9	0.907
4. Monitoring TB situations in the community	6.6	2.6	6.2	2.6	0.523
5. Care planned for the control of TB	8.4	1.3	8.2	1.3	0.717
6. Continuity of care for TB patients	7.5	1.8	7.6	1.7	0.828
VI - Clinical information systems	7.0	1.3	6.7	1.4	0.348
7. Clinical history	7.6	1.6	7.3	1.2	0.574
8. Registration of TB carriers	7.1	1.7	6.4	2.2	0.138
9. Notices and Alerts for health professionals issued by Epidemiological Surveillance, laboratories, etc.	7.0	2.4	7.4	2.4	0.482
10. Return of information	7.2	2.0	5.8	3.4	0.029
11. Information on TB carriers at risk for abandonment, bankruptcy and death	6.1	3.1	6.3	3.2	0.818
12. Care plan for TB patients	6.9	1.7	6.8	1.6	0.909
VII - Integration of the components of the care model for people with TB	5.6	1.2	5.6	1.4	0.888
13. Information to TB patients regarding their care plan	4.3	2.3	4.7	2.7	0.583
14. Records	7.1	2.1	7.2	1.5	0.766
15. Community programs (NGOs, community centers, churches, pastoral, etc.)	1.3	2.2	0.6	1.4	0.201
16. Planning the TB care in the Health Service where the TB patient performs the treatment	6.6	1.9	6.0	2.0	0.251
17. Monitoring the goals and plan of care for TB patients	6.4	2.0	6.5	2.3	0.861
18. Recommendations of the Ministry of Health for the control of TB	7.8	3,2	8,0	2,4	0,796

Key: Optimum Capacity: average between 9 and 11 points - LEVEL A; Reasonable capacity: average between 6 and 8 - LEVEL B; Basic Capacity: average between 3 and 5 - LEVEL C; Limited Capacity: average between 0 and 2 - Level D.

DISCUSSION

Care for tuberculosis (TB) in Primary Care requires a multi-professional approach, in a coordinated way whose operationalization is based on relationships involving people, technology, and resources.^{6,11} The team must have a consensus of the actions given to the individual, decisions, clarity of the proposed objectives and should share the responsibilities, considering that all professionals have the same importance.¹²

This team is called team integration, in which knowledge is shared, and there is an exchange of experiences, and the work happens in an interdisciplinary way.¹² Unlike at the place of study and other places^{6,11,13-5} where the professionals work in a fragmented way, with a medico-centered approach and consequent absence of autonomy of the other professionals, still counting on the divergence of objectives and “alienation” of the situations of the work process of the Institution that they are a part.

As observed in the characterization of the team place that accompanies TB cases, the

nursing team is responsible for most of the activities proposed by the Ministry of Health's Tuberculosis Control Program (PCT), other than diagnosis and prescription of actions Individual, even though it is recommended that all staff participate not only in individual clinical care but also in actions to promote and prevent health and to monitor the TB situation in the community through the active search for symptomatic respiratory, epidemiological surveillance, adequate records of actions, among others.^{6,11,16}

Within the nursing team of the municipality, there is still fragmentation of care, since the nurse is responsible for requesting bacilloscopy, patient/communicator orientation, articulation with other services, supervising the TDO and individual clinical care when necessary. The nursing assistant/technician, in most cases, only supervises the TDO in the health unit, with most of the “bureaucratic” activities are carried out by the nurse, generating work overload and consequent stress and demotivation of the professional, observed in several studies^{4-6,14,17} that

Almeida JB de, Ponce MAZ, Wysocki AD et al.

approached the nursing team in the development of TB control activities.

This picture is observed in the results of this study, in which some aspects investigated on the coordination of care had statistical differences between the averages obtained by the nurses' responses and those of the nursing assistants/technicians, especially in the actions not related to the care of the TB patient.

Nursing assistants/technicians stated that the Local Health Council/Commission had more involvement in TB control decisions than nurses, and in recognition of the study scenario, there was almost no participation of this important instrument for the community participation, even in response to the recommendations of the Ministry of Health so that the community could defend the causes and mobilize to extinguish the disease of the population.¹⁸

It was observed during the study in the daily activities that did not involve the direct assistance to the TB patient, as a response to the concerns of him and his relatives, using the Manual of Guidelines in daily practice, involvement of specialists who are not part of the team, participation in training for TB care and feedback, described as some of the causes of workload of nurses.

Nursing professionals end up assuming simultaneously the actions of supervision, resource management, inputs and care, as well as planning and contact with the different resources of the community to carry out health promotion actions, which complements the idea of division of tasks and fragmentation of the assistance, in addition to becoming a complaint of those professionals who feel unequally burdened with activities in relation to other professionals.^{4,5}

Besides the determinations of health service managers, it is noticed that nurses spontaneously absorb activities of other professionals, mainly due to their training with managerial and administrative focus, preventing them from recognizing the need for the work of the other and division of tasks, leading to fatigue, wear and exhaustion.^{5,6,14}

Faced with work overload, it is necessary to recognize the need for training of other team members as a way of sharing knowledge, since no professional has all the resources and skills necessary for the exclusive solution of health problems.¹⁵

This training does not need only to happen from the central level, as it happens in the study scenario, but it must happen with the contribution of the local team members,

The coordination of assistance in tuberculosis...

including the nurse who is one of the only professionals invited to participate in these training and who should train the nursing team regarding the assistance and bureaucratic aspects related to TB care.

The qualification of health professionals is necessary for early diagnosis, easy identification of respiratory symptomatic in the community, increase of the teams' resolution, facilitating cooperation with specialists, trust with the population and development of new assignments.^{3,19, 20}

A skilled team with a fair division of tasks and responsibilities creates not only the resolution of actions and interdisciplinarity, but also an integral and coordinated assistance, that is, capable of ensuring continuity of care and integrality, both vertical (between the various points of care) and horizontal (articulation between staff, health services and social facilities).²¹

Integrity also includes interactions that take place between the patient and the professionals, which demands both team and management efforts, ranging from aspects involving the sector's political regulations to looking at the subject- patient within a service logic that considers care in the most diverse dimensions of the human being. It can be defined from three sets of meanings: related to professionals' practices, to the organization of services and the coverage of health policies.^{15,22,23}

The health team enables to coordinate care when seeking comprehensive care through the dissemination and exchange of knowledge about the reference and counter-reference between the various points of health care networks and also the exchange of knowledge among the various professionals, whether of direct care character to the TB patient, as well as to the various administrative processes of the daily activities, enabling the expansion of the knowledge and enabling them to an interdisciplinary, resolute and equitable function.

As limitations of the study may be the refusal to participate in the research, interruption of the interview reporting work overload or lack of knowledge about the subject, discrepancies between the answers obtained and the reality of the study scenario.

CONCLUSION

The coordination of TB care is very fragile in the view of the nursing team, since the team in this category still works in a fragmented way, with difficulties of integral approach and, during the analysis of the data,

presenting statistical differences between the responses of nurses and nursing technicians.

The nurses were central to most activities involving communication with other sectors and levels of care, and nursing assistants/technicians were responsible for only the care behaviors. This centralization of work generates occupational stress, overload and lack of interdisciplinary work and still hurts the principle of the horizontal integrality of care.

Individual efforts of the team and municipal politicians are needed to achieve coordinated TB care. The dissemination of the results of studies such as this enables the local reality to be understood and strategies for improvement.

REFERENCES

1. Mendes EV. As redes de atenção à saúde. Ciênc saúde coletiva [Internet]. 2010 [cited 2015 Sept 10];15(5): 2297-305. Available from: <http://dx.doi.org/10.1590/S1413-81232010000500005>.
2. Assis EG, Beraldo AA, Monroe AA, Scatena LM, Cardozo-Gonzales RI, Palha PF et al. A coordenação da assistência no controle da tuberculose. Rev Esc Enferm USP [Internet]. 2012 [cited 2015 Sept 10];46(1):111-8. Available from: <http://www.producao.usp.br/bitstream/handle/BDPI/38417/S0080-62342012000100015.pdf?sequence=1>
3. Almeida PF, Fausto MCR, Giovanella L. Fortalecimento da atenção primária à saúde: estratégia para potencializar a coordenação dos cuidados. Rev panam salud pública [Internet]. 2011 [cited 2015 Sept 10];29(2):84-95. Available from: http://www.scielo.org/scielo.php?script=sci_arttext&pid=S1020-49892011000200003&lng=en. <http://dx.doi.org/10.1590/S1020-49892011000200003>.
4. Caliar JS, Figueiredo RM. Tuberculose: perfil de doentes, fluxo de atendimento e opinião de enfermeiros. Acta paul enferm [Internet]. 2012 [cited 2015 Sept 10];25(1):43-7. Available from: <http://dx.doi.org/10.1590/S0103-21002012000100008>.
5. Feliciano KVO, Kovacs MH, Sarinho SW. Superposição de atribuições e autonomia técnica entre enfermeiras da Estratégia Saúde da Família. Rev saúde pública [Internet]. 2010 [cited 2015 Sept 10];44(3):520-7. Available from: <http://dx.doi.org/10.1590/S0034-89102010005000011>.
6. Sá LD, Oliveira AAV, Gomes ALC, Nogueira JA, Villa TCS, Collet N. Cuidado ao doente de tuberculose na Estratégia Saúde da Família: percepções de enfermeiras. Rev Esc Enferm USP [Internet]. 2012 [cited 2015 Sept 10];46(2):356-63. Available from: <http://dx.doi.org/10.1590/S0080-62342012000200013>.
7. Instituto Brasileiro de Geografia e Estatística. Censo 2010. Available from: <http://censo2010.ibge.gov.br/> . [cited 2014].
8. São José do Rio Preto. Secretaria Municipal de Saúde e Higiene. Plano Municipal de Saúde para São José do Rio Preto 2010-2013. São José do Rio Preto, 2013 [cited 2013 July 25]. Available from: http://gestao.saude.riopreto.sp.gov.br/transparencia/modules/mastop_publish/?tac=Tran_Plan_Muni
9. Brasil. Ministério da Saúde. Secretaria de Vigilância em Saúde. Departamento de Vigilância Epidemiológica. Manual de recomendações para o controle da tuberculose no Brasil / Ministério da Saúde, Secretaria de Vigilância em Saúde, Departamento de Vigilância Epidemiológica. - Brasília : Ministério da Saúde [Internet]. 2011 [cited 2013 July 25]. Available from: http://bvsms.saude.gov.br/bvs/publicacoes/manual_recomendacoes_controle_tuberculose_brasil.pdf
10. Moysés ST, Silveira-Filho AD, Moysés SJ. Laboratório de inovações no cuidado das condições crônicas na APS: A implantação do Modelo de Atenção às Condições Crônicas na UBS Alvorada em Curitiba, Paraná. Brasília: Organização Pan-Americana da Saúde /Conselho Nacional de Secretários de Saude [Internet]. 2012 [cited 2013 Mar 10]. Available from: http://apsredes.org/site2012/wp-content/uploads/2012/11/livro_estudo-de-caso-alvorada.pdf
11. Trigueiro JVS, Nogueira JA, Sá LD, Palha PF, Villa TCS, Trigueiro DRSG. Controle da tuberculose: descentralização, planejamento local e especificidades gerenciais. Rev Latino-Am. Enfermagem [Internet]. 2011 [cited 2013 July 25];19(6):1289-96. Available from: <http://dx.doi.org/10.1590/S0104-11692011000600003>.
12. Kell MCG, Shimizu HE. Existe trabalho em equipe no Programa Saúde da Família?. Ciênc. saúde coletiva [Internet]. 2010 [cited 2015 Sept 10];15(Suppl 1):1533-41. Available from: <http://dx.doi.org/10.1590/S1413-81232010000700065>.
13. Medeiros CRG, Junqueira ÁGW, Schwingel G, Carreno I, Jungles LAP, Saldanha Olinda MFL. A rotatividade de enfermeiros e médicos:

Almeida JB de, Ponce MAZ, Wysocki AD et al.

The coordination of assistance in tuberculosis...

um impasse na implementação da Estratégia de Saúde da Família. Ciênc saúde coletiva [Internet]. 2010 [cited 2015 Sept 10];15(Supl 1):1521-31. Available from: <http://dx.doi.org/10.1590/S1413-81232010000700064>.

14. Silva DM, Nogueira JA, Sá LD, Wysocki AD, Scatena LM, Villa TCS. Avaliação de desempenho de Serviços da Atenção Básica para o tratamento da tuberculose. Rev. Esc. Enferm. USP. 2014 [cited 2015 Sept 10];48(6):1044-53. Available from: <http://dx.doi.org/10.1590/S0080-623420140000700012>.

15. Hino P, Takahashi, RF, Bertolozzi MR, Villa TCS, Egry EY. Family health team knowledge concerning the health needs of the people with tuberculosis. Rev Latino-Am Enfermagem [Internet]. 2012 [cited 2015 Sept 10];20:44-51. Available from: <http://dx.doi.org/10.1590/S0104-11692012000100007>.

16. Santos TMMG, Nogueira LT, Santos LNM, Costa CM. O acesso ao diagnóstico e ao tratamento de Tuberculose em uma capital do nordeste brasileiro. Rev enferm UERJ [Internet]. 2012 [cited 2015 Sept 10];20(3):300-5. Available from: <http://www.facenf.uerj.br/v20n3/v20n3a03.pdf>

17. Sobrinho RAS, Souza AL, Silva LMC, Wysocki AD, Beraldo AA, Villa TCS. Conhecimento de enfermeiros de unidades de Atenção Básica acerca da Tuberculose. Cogitare enferm [Internet]. 2014 [cited 2015 Sept 10];19(1):34-40. Available from: <http://ojs.c3sl.ufpr.br/ojs/index.php/cogitare/article/view/35930/22161>

18. Sá LD, Gomes ALC, Nogueira JA, Villa TCS, Souza KMJ, Palha PF. Intersetorialidade e vínculo no controle da tuberculose na Saúde da Família. Rev Latino-Am Enfermagem [Internet]. 2011 [cited 2015 Sept 10];19(2):[9 screens]. Available from: http://www.scielo.br/pdf/rlae/v19n2/pt_22.pdf

19. Loureiro RB, Villa TCS; Ruffino-Netto A, Peres RL, Braga J, Zandonade E, et al. Acesso ao diagnóstico da tuberculose em serviços de saúde do município de Vitória, ES, Brasil; 2009. Ciênc saúde coletiva [Internet]. 2014 [cited 2015 Sept 10];19:1233-44. Available from: <http://www.redalyc.org/articulo.oa?id=63030543024>

20. Rosado CS, Godínez LL, Ranero VM. Evaluación del Programa Nacional de Control de la Tuberculosis en Bauta. Rev cuba hig epidemiol 2014 [cited 2015 Sept 10];52(1):98-

105. Available from: http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1561-30032014000100009&lng=es.

21. Rodrigues LBB, Silva PCS, Peruhype RC, Palha PF, Popolin MP, Crispim JA et al. A atenção primária à saúde na coordenação das redes de atenção: uma revisão integrativa. Ciênc saúde coletiva [Internet]. 2014 [cited 2015 Sept 10];19(2):343-52. Available from: <http://dx.doi.org/10.1590/1413-81232014192.18032012>.

22. Oliveira IC, Jesus GJ, Pinto PFPS, Balderrama P, Cury MRCO, Vendramini SHF. Tuberculosis control: evaluation of the nursing team on the framework of health services. J Nurs UFPE on line [Internet]. 2012 [cited 2015 Sept 10];6(9):2145-53. Available from: <http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/viewArticle/2580>

23. Brunello MEF, Magnabosco GT, Arakawa T, Andrade RL, Villa TCS. Nursing Approach to the Control of Tuberculosis: Scientific Publications (2002-2011). International Journal of Research in Nursing [Internet]. 2013 [cited 2015 Sept 10];3:30-37. Available from: <http://thescipub.com/html/10.3844/ijrnsp.2012.30.37>

Submission: 2016/06/02

Accepted: 2016/10/20

Publishing: 2016/12/15

Corresponding Address

Janaina Benatti de Almeida
Rua Toribio Arroyo Valério, 1186
Bairro Jardim Ouro Verde
CEP 15084-200 – São José do Rio Preto (SP),
Brazil