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Evaluation of the directly observed therapy for treating tuberculosis according to the dimensions of policy transfer

Avaliação do tratamento diretamente observado da tuberculose segundo dimensões da transferência de políticas

Evaluación del tratamiento directamente observado de la tuberculosis según dimensiones de la transferencia de políticas

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ABSTRACT

Objective: To evaluate the directly observed therapy for treating tuberculosis in the Primary Health Care Service according to the dimensions of policy transfer. **Method:** Descriptive study, conducted with professionals from Basic Health Units in the city of São Paulo, SP state. The interviews were conducted from May to July/2016, using a validated, self-administered instrument with 39 items on a five-point Likert scale. The variables were organized in the dimensions: information, knowledge and innovation. The mean of the responses was calculated: the means between four and five were classified as adequate, between two and a half and three and a half as fair, and between one and two as inadequate. **Results:** 112 health professionals participated in the study. In the dimension of information, participation of the community in the treatment was considered fair. In the dimension of knowledge, the treatment routine in the unit and the participation of the professionals in trainings were classified as fair. In the dimension of innovation, the unit infrastructure, the use of community resources and the creation of strategies to promote patient adherence were evaluated as fair. The other variables were adequate. **Conclusion:** The transfer of the directly observed therapy for treating tuberculosis in the Primary Health Care assessed has been occurring gradually and successfully.

DESCRIPTORS

Tuberculosis; Directly Observed Therapy; Primary Health Care; Public Health Policy.

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INTRODUCTION

Tuberculosis (TB) is an infectious disease related to poverty, vulnerable populations and urban agglomerations. The World Health Organization (WHO) estimated that, in 2015, 10.4 million people were infected and 1.4 million died from the disease in the world. In that same year, TB was one of the top 10 causes of death worldwide[1].

In Brazil, in 1998, the National Tuberculosis Control Program (PNCT) implemented the Directly Observed Therapy (DOT), a central pillar of the Directly Observed Treatment Short Course (DOTS) strategy. The main objectives of this policy are: to create a bond with the user, to promote therapeutic adherence and to improve cure rates. A systematic review demonstrated that DOT is more effective than the self-administered treatment for a successful outcome of the treatment[2]. The implementation of this strategy presents some challenges, related to the organization and management of health services, the geopolitical context, and the long period of adaptation required among health professionals and local governments. However, improvements related to this policy can be observed in the TB control indicators, particularly among vulnerable populations such as homeless people, injecting drug addicts and alcoholics[3-4].

The success of the DOT transfer as a policy is directly related to three dimensions: the information about the DOT received by the professionals who will implement this policy; the knowledge of these professionals about the policy; and innovation, or mode of implementation, of this new policy/action[5]. In addition, the effectiveness of the DOT implies a therapeutic plan that considers the singularities, the health needs and the social context of the user[6].

Regarding the production of care for TB patients in Primary Health Care (PHC), a study carried out in São Paulo, SP, Brazil, shows that family health teams achieve good treatment outcomes that are related to the longitudinality and the proximity with the users' life context. Operationally, the nurse, the Community Health Agent (CHA) and the nursing technician are considered as protagonists in the implementation of the DOT policy, developing multiple and caring actions[7].

Health professionals who monitor the DOT are responsible for the success of this policy. They must have technical, managerial and relational knowledge and skills, which must demonstrate quality, ethics and accountability for comprehensive care. However, the DOT must not be a representation of the discourses that characterize the TB patient as infantile, voiceless and with no rights to claim[8].

The objective of this study was to evaluate the Directly Observed Therapy for treating Tuberculosis in Primary Health Care, according to the dimensions of policy transfer. The "Policy Transfer" concept was used as conceptual framework. It can be defined as "a process in which knowledge about policies, administrative arrangements and institutions in one political setting is used in the development of policies, administrative arrangements and institutions in another political setting"[9-10].

Therefore, policy transfer is a complex process involving a variety of actors, instances, institutions and organizations. It consists of partial or complete transference of a policy or program from one political setting to another, requiring adaptations from policy-makers at another time or space[9-10].

Several investigations address the practice of DOT, but do not discuss the policy transfer and how this process influences the practice of healthcare professionals in the care of the TB patient. Therefore, it is a relevant perspective for public health policies and an inovation among scientific studies developed in Brazil, which makes it worthy of further development[7].

Therefore, the usage of this framework is essential to assess the transfer of the DOT for treating TB in PHC, understanding it as part of the health policies related to disease control in the Brazilian and international scenario. This aims to contribute to the advancement of Nursing and Health Sciences and to provide support to management and care practices to identify potentialities and weaknesses in the transfer process of this health policy/practice.

METHOD

This quantitative descriptive study was conducted in Basic Health Units (*Unidade Básica de Sáude* – UBS) with the Family Health Strategy Program in the Southeast Regional Health Coordination Office (RHC) of the Municipal Health Office of São Paulo (SMS/SP), state of São Paulo, Brazil.

According to data from the SMS/SP Epidemiology and Information Office, in 2011, the Southeast RHC stood out for having the lowest TB incidence rate (43.6 per 100,000 inhabitants) among all the RHC, which justifies the choice for this study scenario[11].

The state of São Paulo uses the TBWEB system for the epidemiological surveillance of TB. The system is used for registering the cases and for real-time monitoring of the patient undergoing one or more treatments. In the city of São Paulo, DOT is recommended for all TB cases and its coverage is increasing and including incentives for adherence, such as basic food staples and transportation. The DOT is overseen by health professionals at the patient's home or at the UBS, respecting the agreement signed at the beginning of treatment.

The study population was estimated in 429 healthcare professionals (physicians, nurses, nursing technicians/assistants) involved in the control of TB in PHC. As inclusion criteria, the professionals should have at least 6 months of experience in the PHC.

In the sample calculation, the estimated variance of the mean (S^2=1) was assumed as the value proposed in the literature by Almeida and Macinko, in 2006, and the difference between the simple sample mean and the population mean (B=0.2) and probability of type I error equal to ($Z_{\alpha = 5\%}$ = 1.96). The size of the "simple" sample was estimated as 97 subjects according to the following equation[12]:

$$n = \frac{\sigma_d^2}{D} \cong \frac{S_d^2}{D} \quad being\ D = \frac{B^2}{Z_\alpha^2}$$

Considering a sampling error of 15% (losses or refusals), the final sample was calculated as 112 professionals.

The technique used was convenience sampling. The health units were drawn and three professionals from each family health team of the UBS who met the inclusion criteria were interviewed. If the health service drawn did not include the required number of interviewees to reach the sample size, a new unit was drawn until the number of professionals in the sample calculation was reached. It is important to note that the manager of one health unit did not allow the interviews; therefore, this unit was excluded from the study.

In this process, professionals from eight UBS were interviewed, representing 46 teams out of the 143 from the Southeast RHC. Thus, 112 health professionals participated in the study.

For the data collection, a self-administered instrument called Evaluation of the Policy Transfer – Innovation, Information and Knowledge in Tuberculosis Control (ATP-IINFOC-TB) was used[5]. This instrument went through a layout and content validation carried out by experts, and semantic validation, carried out by health professionals (nursing assistants and technicians, nurses and physicians) [5]. The instrument is composed of 39 items, distributed in three dimensions of the policy transfer, formulated by the research group based on the work of specialists: Information, Knowledge and Innovation[13]. The instrument is structured on a Likert scale with favorable and unfavorable statements about the DOT policy transfer, in which the subjects were able to express their degree of agreement, varying between five levels: (1) Disagree, (2) Partially Disagree, (3) Neither agree nor disagree, (4) Partially agree and (5) Agree.

Data was collected between May and July 2016 by two researchers, with prior planning. For the interviews, the managers of the UBS were initially contacted by telephone to present the study and invite them to participate. After the agreement of the manager, the application of the self-administered instrument was scheduled in the health unit.

The data obtained in the interviews were typed and checked, and then analyzed using the software Statistica 13 from Statsoft.Inc. Initially, an exploratory data analysis was performed through absolute and relative frequency distribution of the variables, to verify possible inconsistencies and errors in the entry or omission of answers by the participants.

Subsequently, graphs with the means and respective confidence intervals of the responses to each item of the instrument were constructed. The overlap or distinction of these confidence intervals provided information that classified the evaluation of the transfer of the DOT to the health services without any other test. Therefore, variables with confidence intervals that ranged from four to five were classified as adequate; from two and a half to three and a half as fair; and from one to two as inadequate. For this classification, three questions (V4, V12 and V16), with negative statements, had their answer category reversed to (1) Agree, (2) Partially Agree, (3) Neither agree nor disagree, (4) Partially Disagree, and (5) Disagree.

This study was approved by the Research Ethics Committee of the Universidade Federal de São Paulo (protocol no. 1.402.860) and by the Municipal Health Department of São Paulo (protocol no. 1.466.699). The study was previously authorized by the manager responsible for the Southeast RHC and was conducted according to ethical standards required by Resolution 466/2012 of the National Health Council.

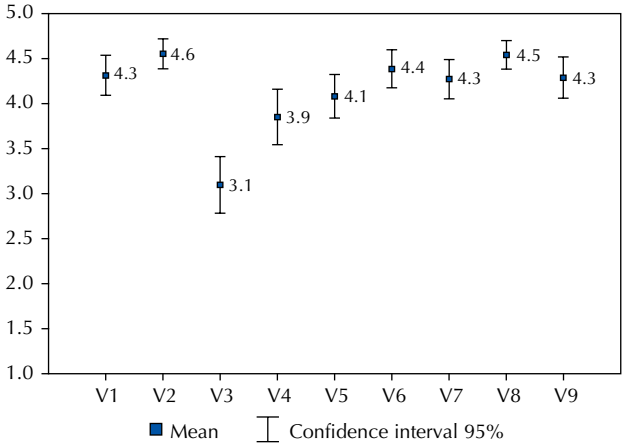
RESULTS

Among the 112 health professionals interviewed, 28 (25%) were physicians, 42 (38%) were nurses and 42 (38%) were nursing assistants or technicians. Most of the interviewees were female (80%), with a mean age of 39 years (minimum of 23 and maximum of 71 years). Of the 39 items contained in the instrument, 32 (85%) had a satisfactory evaluation by the interviewees. In figures 1 to 3, it is possible to verify that no variable received unsatisfactory evaluation regarding the transfer of the DOT to the health services.

In the dimension of information, the variable V3 (participation of the population in the discussions about the DOT) was the only one evaluated as fair. The others received adequate evaluation (Figure 1).

In the dimension knowledge, the variables V13 (the team considers DOT a simple routine) and V15 (participation of professionals in training offered by the Department of Health on DOT) were evaluated as weak and the others as satisfactory (Figure 2).

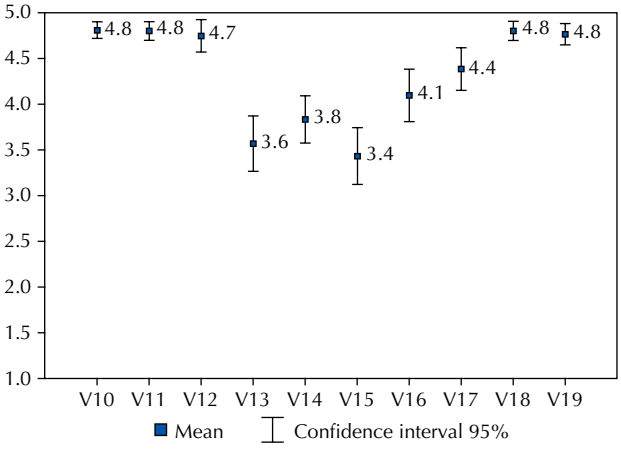
The variables in the dimension innovation were evaluated as adequate, with the exception of V21 (the health unit has adequate infrastructure to assist the patient in DOT), V31 (other strategies to promote adherence to DOT are created), V32 (community resources are used to support patient adherence to the DOT) and V37 (newly recruited or reassigned professionals receive training on DOT), which were evaluated as fair (Figure 3).



Legend: V1 – The TCP* discusses the DOT with the unit's team; V2 – The DOT is discussed among the professionals who work with tuberculosis in the unit; V3 – The population participates in discussions about the DOT; V4 – There is no integration between the TCP* and the unit's team; V5 – The TCP* uses strategies to motivate the unit's team in relation to the DOT; V6 – The TCP uses clear and concise language to discuss the DOT; V7 – Education and awareness strategies are used in the implementation of the DOT; V8 – The awareness strategies have positive impacts on the DOT; V9 – I have access to educational materials on DOT.

*TCP – Coordination of the Tuberculosis Control Program (municipal and state levels).

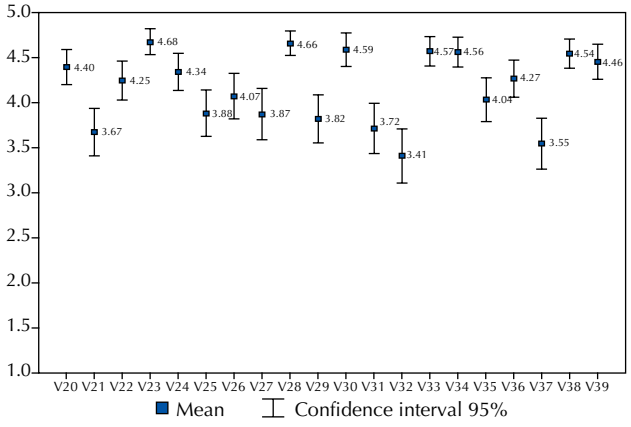
Figure 1 – Answers of the Family Health professionals regarding the transfer of the directly observed therapy (DOT) of tuberculosis to Basic Health Units/dimension of "information", Southeast Health Coordination, São Paulo, São Paulo, Brazil, 2016.



Legend: V10 – I understand the guidelines of the DOT; V11 – I understand the protocol for monitoring the DOT; V12 – I do not follow the DOT guidelines because I do not understand their importance; V13 – The team considers DOT a simple routine; V14 – The TCP* provides training on DOT; V15 – I receive training from the Health Department about the DOT; V16 – The health unit does not release me to participate in training on the DOT; V17 – Professionals discuss clinical cases of patients on DOT at meetings; V18 – The unit's team recognizes the importance of DOT; V19 – For the success of the DOT, it is necessary to incorporate other institutions besides the health unit.

*TCP – Tuberculosis Control Program (municipal and state levels).

Figure 2 – Answers of the Family Health Strategy professionals regarding the transfer of the directly observed therapy (DOT) of tuberculosis to Basic Health Units/dimension of "knowledge", Southeast Health Coordination, São Paulo, São Paulo, Brazil, 2016.



Legend: V20 – The educational materials of the health unit guide my professional practice with the DOT; V21 – The health unit has adequate infrastructure to assist the patient on DOT; V22 – The unit has adequate human resources for the DOT; V23 – The DOT requires an individual care plan for each TB patient; V24 – In the unit there is an individual care plan for each patient on DOT; V25 – The patient on DOT participates in the elaboration of his care plan; V26 – The TB patient has autonomy to decide whether to participate in the DOT; V27 – The TB patient has autonomy to choose the treatment modality (supervised or self-administered); V28 – The team considers that the DOT qualifies the care of the TB patient; V29 – The unit created new strategies to work with the DOT; V30 – The unit offers benefits to promote adherence of TB patients to the DOT; V31 – Other strategies to promote adherence to the DOT are created in the health unit; V32 – Community resources are used to promote adherence to the DOT; V33 – The DOT has contributed to health promotion among TB patients; V34 – The DOT is conducted in a multi-professional way; V35 – I develop intersectoral actions for patient adherence to DOT; V36 – I feel motivated in relation to the DOT; V37 – Newly recruited or reassigned professionals receive training on DOT; V38 – The difficulties of the patients on DOT are perceived by the health team; V39 – The health team adapted the DOT to the reality of its area of coverage.

Figure 3 – Answers of the Family Health Strategy professionals regarding the transfer of the directly observed therapy (DOT) of tuberculosis to Basic Health Units/dimension of "innovation", Southeast Health Coordination, São Paulo, São Paulo, Brazil, 2016.

DISCUSSION

The present study uses an instrument that assesses the transfer of the DOT policy to PHC, according to three dimensions: information, knowledge and innovation[5]. The transfer process may go through the stage in which the information about the DOT is received and stop there, or it can move to the knowledge stage, when the professional can comprehend what he has learned. Besides that, if it moves forward, it can be presented as an innovation, transforming everything that was learned and assimilating it into a practice incorporated into the daily services.

The implementation and sustainability of the DOT depend on the involvement of key individuals that can ensure that the care provided to the TB patient in PHC is of high quality. The health managers are in charge of making a political commitment, so that this disease can be controlled with the participation of the coordinators of local TB Control Programs and especially of health professionals and the population[14].

In the dimension of information, all variables were considered adequate, except for the participation of the population in the discussions about the DOT, which was evaluated as fair. One study presented a similar result, pointing out that one of the challenges for the control of TB is the community's lack of interest in participating in health education activities regarding TB[15], diverging from scientific evidence that indicates that the performance of the community improves the results in the control of the disease. This was observed in a study that aimed to analyze the participation of a committee formed by representatives of the community in the control of TB, which showed the potential of this participatory management model in the control of the disease[16].

Social participation in the fight against a disease like TB is not only a possibility of exercising citizenship, it also enables the creation of spaces that defend the health of the population according to their needs[16]. Another experience observed in Peru discusses the potential of social participation and mobilization on the fulfillment of health rights, considering the community involvement in issues related to cancer, human immunodeficiency virus and TB as a key element for the improvement of people's health conditions, for the decision-making processes and for the implementation of health programs[17].

In this study, some professionals interviewed do not consider DOT as a simple UBS routine. This result is in agreement with a study developed in Paraíba state, Brazil, in which the authors point out that DOT goes beyond the simple observation of medication intake: it is a challenge for inter-professional collaboration among the health team and with the managers, aimed at the development of a comprehensive therapeutic project[18].

Another finding of this research was the participation of PHC workers in permanent education activities, which was evaluated as fair. On this point, a study concluded that teaching and learning practices incorporated in PHC have increased in recent years, but there are still only occasional and informative actions, with low potential to induce permanent change[19].

The control of TB must include the qualification and continuous training of professionals from the different

services that represent the patient's gateway to the health system, so that TB can be early diagnosed[20]. Thus, the challenge is to constantly invest in the permanent education of professionals in the Family Health Strategy, either in the phase that precedes the implementation of a new proposal or during its activities. It should be noted that the introduction of new policies at work requires adaptation of roles and changes in the organization of the work process.

A study carried out in Tanzania with health professionals, patients and family members, pointed out that workers should be made aware of the elements of the DOTS and that their knowledge needs to be renewed, focusing on the development and effectiveness of the strategy[21].

Regarding the implementation of the DOT, the Ministry of Health recommends four types of supervision: at the patient's home, at the health unit, in the prison system and the combined modality[22]. However, the health team, in partnership with the patient, should evaluate the therapeutic project considering the patient's health needs and desires, in order to promote therapeutic adherence.

In this study, the creation of new strategies for the therapeutic adherence of the user and the incorporation of community resources for this purpose were evaluated as fair by the professionals interviewed.

Adherence to treatment is a key point for the control of TB[22]. In addition, the DOT policy must be inter-professional and developed with teamwork, addressing it as a care to be offered to the TB patients and their family in a comprehensive way[23].

Finally, the problem related to the infrastructure of the UBS for caring for the TB patient is highlighted in this study. The scientific literature points out that adequate physical structure and resources for the TB control are elements that enhance the sustainability of the DOTS strategy[18].

It is clear that the dimensions of information, knowledge and innovation are interconnected in the policy transfer[9-10]. In this way, the implementation and the success of the DOT policy depend on the transmission of information and its transformation into knowledge, as well as on governance, which involves policy-makers, administrators and those who manage daily work, who depend on a period of adaptation and capacity to find innovative strategies for the inclusion of DOT in the daily work with community involvement.

CONCLUSION

The present study views DOT as a practice widely used among healthcare professionals who work in the Family Health Strategy. The transfer of the DOT for treating TB in PHC in Brazil includes diverse experiences from over more than a decade and a half, and the conceptual framework of Policy Transfer is a new perspective to understand this process.

According to the professionals interviewed, despite the barriers to the development of this type of TB treatment, the transfer of the DOT as a TB control policy to PHC has been occurring successfully, given the positive result for most items that assessed this process.

The aspects assessed as fair in this study are related to topics such as patient participation, strategies for promoting adherence, qualification of health professionals and availability of adequate infrastructure in the health services for the appropriate implementation of this policy. These indicators allow identifying weaknesses which management should improve to qualify the performance of the DOT. This should include increasing social participation, developing a Single Therapeutic Project for the person with TB, rethinking strategies for a permanent education that promotes the improvement of health professionals, and planning interventions aimed at improving the available infrastructure.

The instrument applied is a tool for the analysis of the potentialities and weaknesses related to the transfer of the DOT. It allowed the assessment of local and regional particularities regarding the implementation of the DOT, related to management characteristics, health education and assistance models in the different instances of the Unified Health System.

Since management is one of the attributes of the nursing professional, the study gains relevance for proposing strategies for the improvement of DOT as a TB control action. It can stimulate action planning, which should be developed by nursing professionals who work in management and performed by professional nurses in the delivery of care in the daily health services.

Among the limitations of the study, a possible selection bias can be pointed, since the sample was obtained using convenience sampling.

RESUMO

Objetivo: Avaliar o tratamento diretamente observado da tuberculose na Atenção Primária à Saúde, segundo dimensões da transferência de políticas. **Método:** Estudo descritivo, realizado com profissionais de Unidades Básicas de Saúde, do município de São Paulo, SP. As entrevistas foram realizadas de maio a julho/2016, mediante instrumento validado, autoaplicável, com 39 itens, em escala Likert com cinco níveis. As variáveis foram organizadas nas dimensões: informação, conhecimento e inovação. Calculou-se a média das respostas dos entrevistados e classificaram-se como satisfatórias as médias entre quatro e cinco, regulares entre dois e meio e três e meio e insatisfatórias entre um e dois. **Resultados:** Participaram do estudo 112 profissionais de saúde. Em informação, a participação da comunidade no tratamento foi considerada regular. Em conhecimento, a rotina do tratamento na unidade e a participação dos profissionais em treinamentos apresentaram classificação regular. Em inovação, a infraestrutura da unidade, o uso de recursos comunitários e a criação de estratégias para promover a adesão do doente ao tratamento obtiveram avaliação regular. As demais variáveis foram satisfatórias. **Conclusão:** A transferência do tratamento diretamente observado da tuberculose para a Atenção Primária à Saúde, no local estudado, vem ocorrendo gradativamente e com sucesso.

DESCRITORES

Tuberculose; Terapia Diretamente Observada; Atenção Primária à Saúde; Políticas Públicas de Saúde; Enfermagem de Atenção Primária.

RESUMEN

Objetivo: Evaluar el tratamiento directamente observado de la tuberculosis en la Atención Primaria de Salud, según dimensiones de la transferencia de políticas. **Método:** Estudio descriptivo, realizado con profesionales de Unidades Básicas de Salud del municipio de São Paulo, SP. Las entrevistas fueron realizadas de mayo a julio/2016, mediante instrumento validado, autoaplicable, con 39 puntos, en escala Likert con cinco niveles. Las variables fueron organizadas en las dimensiones: información, conocimiento e innovación. Se calculó el promedio de las respuestas de los entrevistados y se clasificaron como satisfactorios los promedios entre cuatro y cinco; regulares, entre dos y medio y tres y medio; e insatisfactorios, entre uno y dos. **Resultados:** Participaron en el estudio 112 profesionales sanitarios. En información, la participación de la comunidad en el tratamiento se consideró regular. En conocimiento, la rutina del tratamiento en la unidad y la participación de los profesionales en entrenamientos presentaron clasificación regular. En innovación, la infraestructura de la unidad, el uso de recursos comunitarios y la creación de estrategias para promover la adhesión del enfermo al tratamiento lograron evaluación regular. Las demás variables fueron satisfactorias. **Conclusión:** La transferencia del tratamiento directamente observado de la tuberculosis a la Atención Primaria de Salud, en el sitio estudiado, está ocurriendo gradualmente y con éxito.

DESCRIPTORES

Tuberculosis; Terapia por Observación Directa; Atención Primaria de Salud; Políticas Públicas de Salud; Enfermería de Atención Primaria.

REFERENCES

1. World Health Organization. Global Tuberculosis Report 2016. Geneva: WHO; 2016.
2. Tian JH, Lu ZX, Bachmann MO, Song FJ. Effectiveness of directley observed treatment of tuberculosis: a systematic review of a controlled studies. Int J Tuberc Lung Dis. 2014;18(9):1092-8.
3. Ibanês AS, Carneiro Junior N. Panorama internacional e nacional da estratégia do tratamento diretamente supervisionado (DOTS) nas políticas de controle da tuberculose. ABCS Health Sci. 2013;38(1):25-32. DOI: 10.7322/abcshs.v38i1.5.
4. Lavôr DCBS, Pinheiro JS, Gonçalves MJF. Evaluation of the implementation of the directly observed treatment strategy for tuberculosis in a large city. Rev Esc Enferm USP. 2016;50(2):245-52. DOI: 10.1590/S0080-623420160000200010
5. Silva LMC, Surniche CA, Sicsú AN, Mitano F, Nogueira JA, Santos CB, et al. Elaboração e validação semântica de um instrumento de avaliação da transferência do tratamento diretamente observado como política de controle da tuberculose. Rev Panam Salud Pública. 2015;38(2):129-35.
6. Silva DM, Nogueira JA, Sá LD, Wysocki AD, Scatena LM, Villa TCS. Performance evaluation of primary care services for the treatment of tuberculosis. Rev Esc Enferm USP. 2014;48(6):1041-50. DOI: 10.1590/S0080-623420140000700012
7. Souza KMJ, Sá LD, Silva LMC, Palha PF. Nursing performance in the policy transfer of directly observed treatment of tuberculosis. Rev Esc Enferm USP. 2014;48(5):870-8. DOI: 10.1590/S0080-623420140000500014
8. Souza KMJ, Sá LD, Assolini FEP, Queiroga RPF, Surniche CA, Palha PF. Discursos sobre a tuberculose: estigmas e consequências para o sujeito adoecido. Rev Enferm UERJ. 2015;23(4):475-80. DOI: 10.12957/reuerj.2015.16106.
9. Dolowitz DP. A Policy-maker's guide to policy transfer. Polit Q. 2003;74(1):101-8. DOI: 10.1111/1467-923X.t01-1-00517.
10. Dolowitz DP, Marsh D. Learning from abroad: the role of policy transfer in contemporary policy-making. Governance. 2000;13(1):5-24. DOI: 10.1111/0952-1895.00121
11. São Paulo (Cidade). Secretaria Municipal de Saúde; Coordenação de Epidemiologia e Informação (CEInfo). Diagnóstico sintético da saúde na cidade de São Paulo [Internet]. São Paulo; 2011 [citado 2017 jun. 15]. Disponível em: http://www.prefeitura.sp.gov.br/cidade/secretarias/upload/saude/arquivos/publicacoes/Indicadores_DS_Caderno_2004_2011.pdf
12. Bolfarine H, Bussab WO. Elementos de amostragem. São Paulo: Universidade de São Paulo; 2004.
13. Bissell K, Lee K, Freeman R. Analysing policy transfer: perspectives for operational research. Int J Tuberc Lung Dis. 2011;15(9):1140-8.
14. Oliveira RCC, Sá LD, Dias PCB, Pinheiro PGOD, Palha PF, Nogueira JA. Speeches of managers about the policy of the directly observed treatment for tuberculosis. Rev Bras Enferm. 2015;68(6):761-8.
15. Sá LD, Gomes ALC, Carmo JB, Souza KMJ, Palha PF, Alves RS, Andrade RLP. Educação em saúde no controle da tuberculose: perspectiva de profissionais da estratégia Saúde da Família. Rev Eletr Enf [Internet]. 2013 [citado 2017 jun. 15];15(1):103-11. Disponível em: https://www.fen.ufg.br/fen_revista/v15/n1/pdf/v15n1a12.pdf
16. Bulgarelli AF, Villa TCS, Pinto IC. Social organization and control of tuberculosis: the experience of a Brazilian town. Rev Latino Am Enfermagem. 2013;21(5):1039-48.
17. Sandoval C, Cáceres CF. Influence of health rights discourses and community organizing on equitable access to health: the case of HIV, tuberculosis and cancer in Peru. Global Health. 2013;9:23. DOI: https://doi.org/10.1186/1744-8603-9-23
18. Sá LD, Oliveira AAV, Gomes ALC, Nogueira JA, Villa TCS, Collet N. Caring for tuberculosis patients in the Family Health Strategy: the nurses' perceptions. Rev Esc Enferm USP. 2012;46(2):356-63. DOI: http://dx.doi.org/10.1590/S0080--62342012000200013
19. Pinto HA, Ferla AA, Ceccim RB, Florêncio AR, Barbosa MG, Stédile NLR, et al. Atenção básica e educação permanente em saúde: cenário apontado pelo Programa Nacional de Melhoria do Acesso e da Qualidade da Atenção Básica (PMAQ-AB). Divulg Saúde Debate. 2014;(51):145-60.
20. Ponce MAS, Wysocki AD, Scatolin BE, Andrade RLP, Arakawa T, Ruffino-Netto A et al. Tuberculosis diagnosis and performance assessment of the fi rst health service used by patients in São José do Rio Preto, São Paulo State, Brazil. Cad Saúde Pública. 2013;29(5):945-54.
21. Mkopi A, Range N, Amauri M, Geubbels E, Lwilla F, Egwaga S, et al. Health worker's performance in the implementation of Patient Centred Tuberculosis Tretament (PCT) strategy under programmatic conditions in Tanzania: a cross sectional study. BMC Health Serv Res. 2013;13:101. DOI: 10.1186/1472-6963-13-101

22. Brasil. Ministério da Saúde; Secretaria de Vigilância em Saúde. Programa Nacional de Controle da Tuberculose. Manual de recomendações para o controle da tuberculose no Brasil. Brasília; 2010.

23. Caliari JS, Figueiredo RM. Tuberculosis: patient profile, service flowchart, and nurses' opinions. Acta Paul Enferm. 2012;15(1):43-7. DOI: 10.1590/S0103-21002012000100008

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