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Importance of treatment directly observed of tuberculosis in the perception of nurses

Importancia del tratamiento directamente observado de la tuberculosis en la percepción de las enfermeras

Importância do tratamento diretamente observado da tuberculose na percepção dos enfermeiros

ABSTRACT

Objective: This study aimed to evaluate the importance of performing the Directly Observed Treatment of Tuberculosis (DOT) in the perception of nurses in family health units in the city of Cajazeiras-PB. **Methods:** This is a descriptive exploratory field study with a qualitative approach. The research took place in Family Health Units in the municipality of Cajazeiras. As a technique for data collection, a semi-structured interview was used. **Results:** They were divided into two categories: socio-demographic data and importance in carrying out the DOT. Eighteen nurses participated in the research, of which 2 were men and 16 women. Most professionals had more than 5 years of professional activity and had postgraduate degrees in the area of expertise. In addition, the majority emphasized that DOT is important due to the formation of a bond with the user and the consequent prevention of abandonment of treatment. **Conclusion:** This study provided more knowledge about the importance from the perspective of the interviewees, because through the link between the team and the tuberculosis patient it is possible to monitor the take, identify the adverse factors, avoid abandonment, and especially follow the evolution.

DESCRIPTORS: Tuberculosis; Surveillance; Primary health care; Family Nurse Practitioners.

RESUMEN

Objetivos: Este estudio tenía como objetivo evaluar la importancia de realizar el tratamiento directamente observado de la tuberculosis (TDO) en la percepción de enfermeras en unidades de salud familiar en la ciudad de Cajazeiras-PB. **Métodos:** Se trata de un estudio de campo exploratorio descriptivo con enfoque cualitativo. La investigación se llevó a cabo en Unidades de Salud de la Familia del municipio de Cajazeiras. Como técnica para la recolección de datos se utilizó una entrevista semiestructurada. **Resultados:** Se dividieron en dos categorías: datos sociodemográficos e importancia en la realización del TDO. En la investigación participaron 18 enfermeros, de los cuales 2 eran hombres y 16 mujeres. La mayoría de los profesionales tenían más de 5 años de actividad profesional y tenían títulos de posgrado en el área de especialización. Además, la mayoría enfatizó que el TDO es importante debido a la formación de un vínculo con el usuario y la consecuente prevención del abandono del tratamiento. **Conclusión:** Este estudio proporcionó un mayor conocimiento sobre la importancia desde la perspectiva de los entrevistados, ya que a través de la relación del equipo con el paciente tuberculoso, es posible monitorear la toma, identificar los factores adversos, evitar el abandono y, especialmente, seguir la evolución.

DESCRIPTORES: Tuberculosis; Vigilancia; Atención primaria de salud; Enfermeras de Familia.

RESUMO

Objetivo: Este estudo objetivou avaliar a importância da realização do Tratamento Diretamente Observado da tuberculose (TDO) na percepção dos enfermeiros das unidades de saúde da família no município de Cajazeiras-PB. **Métodos:** Trata-se de um estudo de campo do tipo exploratório descriptivo com abordagem qualitativa. A pesquisa ocorreu nas Unidades de Saúde da Família do município de Cajazeiras. Como técnica para coleta de dados, foi utilizada uma entrevista semiestructurada. **Resultados:** Foram divididos em duas categorias: dados sócio demográficos e importância na realização do TDO. Participaram da pesquisa 18 enfermeiros, destes 2 eram homens e 16 mulheres. A maioria dos profissionais tinham mais de 5 anos de atividade profissional e possuíam pós graduação na área de atuação. Além disso, a maioria enfatizou que é importante o TDO pela formação do vínculo com usuário e a consequente prevenção do abandono ao tratamento. **Conclusão:** A realização deste estudo proporcionou um maior conhecimento a respeito da importância pela perspectiva dos entrevistados, pois através do vínculo da equipe com o doente de tuberculose é possível realizar o monitoramento das tomadas, identificar os fatores adversos, evitar o abandono e principalmente acompanhar a evolução.

DESCRIPTORES: Tuberculose; Vigilância; Atenção primária à saúde; Enfermeiros de Saúde da Família.

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INTRODUCTION

Tuberculosis (TB), although recognized as a causal agent and long-established treatments, persists as a relevant public health problem, especially in developing countries.¹ It is an infectious disease, caused by the bacterium *Mycobacterium Tuberculosis*.²

Brazil is among the countries with the highest burden of the disease, with an incidence rate of 34,8 cases per 100 thousand inhabitants in 2018, since it has been distancing itself from the rate recommended by the World Health Organization (WHO), of 10 cases/100 thousand inhab., which highlights the need for advances to reach the WHO target.³

Worldwide, Tuberculosis Control Programs, guided by the Stop TB strategy - implemented from 1990 to 2015 to eliminate tuberculosis as a public health problem - recommend the implementation and sustainability of the Directly Observed Treatment Short-Course strategy (DOTS) aiming to improve the conditions of laboratory diagnosis, treat-

ment under supervision with continuous supply of drugs and an adequate information and registration system to monitor the development of the Program.^{4,5}

DOTS consists of observing medication intake, a strategy that aims at the individual's adherence. At least 72 doses of standardized medication should be supervised in two phases of treatment: 24 in the first and 48 doses in the second.⁶

These drugs have been used inappropriately or the patient has abandoned them for more than thirty days, mainly with the finding of clinical improvement and constitute two conditions that accentuate the difficulties in eliminating the disease. Although the Ministry of Health (MH) has adopted DOTS, this strategy differs in that it provides a unique approach, demonstrates considerable progress, but the dropout rates still remain high.⁴

The DOTS ensures a link between the health service, the patient and the family, identifying risk groups for non-adherence to treatment, allowing professionals to get closer to individuals and their social

context. This strategy helps to deflect barriers that hinder treatment adherence, and should develop a plan for the demands encountered.⁷

The present study is justified due to the relevance of TB treatment supervision due to the role of the nursing professional, since they are the ones who make the diagnosis and accompany the patient throughout the treatment until discharge due to cure. Insto will contribute to the control of the disease, increasing the chances of cure and reducing the number of cases of abandonment, which will serve as a basis for research in order to collaborate to improve the assistance provided.

Therefore, primary care professionals must have an attitude of vigilance regarding the importance of their actions in the realization of DOTS on TB. Given the above, the question that guided the execution of this research was: what is the importance of performing DOTS under the perception of nurses in Family Health Units in the city of Cajazeiras-PB?

METHOD

This is a descriptive exploratory field study with a qualitative approach, carried out with nurses from Family Health Units (FHU) who treated people with tuberculosis.

The study population is composed of 23 professional nurses from USFs in the municipality of Cajazeiras-PB in rural and urban areas. The sample was composed of nurses who agreed to participate in the research and met the inclusion criteria for the study.

It was defined as inclusion criteria adopted for the study that the nurse was performing work activities during the research period and as exclusion criteria, being on vacation or away and on sick leave.

Data collection was carried out at the respective FHU, after previous scheduling of dates and times for the execution of the same according to the availability of the participants. They were collected individually, containing objective questions, which allowed the characterization of the subjects' profile and subjective questions, guiding the proposed theme,

respecting the free expression of their representations and meanings. The interviews were recorded with the authorization of the interviewees in a reserved place and later they were transcribed the same as what was said.

The data obtained through the interview were organized in the form of categories, which were presented in tables. The qualitative data were worked through Bardin's content analysis (CA) and analyzed using relevant literature.

This CA expression indicates categories of communication analysis techniques, with a view to acquiring, through systematic and objective procedures for describing the content of messages, indicators, whether quantitative or not, that allow the inference of knowledge related to the conditions of production/reception (inferred variables) of these messages.⁸

The analysis follows the steps of the CA method: organization of the analysis, coding, categorization and inference.⁸ After transcribing the interviews, the statements were visualized, then grouped into analysis categories (method of analysis by thematic categories).

The research project was approved by the Research Ethics Committee of the Teacher Training Center-Federal University of Campina Grande under CAAE nº 58915116.1.0000.5182 and opinion number 1.756.039.

RESULTS

Next, the results achieved through the semi-structured interview script will be presented. The data were divided into two categories, the first referring to socio-demographic data and in the second category, the results of the research were presented in view of the nurses' statements regarding the importance of carrying out the DOT in the USF.

Category 1- Sociodemographic characterization

Eighteen of the 23 FHS nurses in the municipality of Cajazeiras - PB participated in the research. Of the 18 interviewees, 2 were men and 16 women; ages ranged from 25-30 years (27,8%), 31-40 (61,1%), 41-60 (11,1%); of these 38,9% were single and 44,4% were married. Regarding professional activity time less than 1 year (5,5%), 1-5 years (38,9%), 6-10 years (38,9%), 11-22 years (16,7%), of these 61,1% had postgraduate degrees in the area of activity and 61,1% also had another job.

Category 2 - importance of carrying out the DOT in the perception of nurses

At this stage, the interviewees' perception of the DOT was evaluated, why they considered it important to carry it out and the reasons for the importance of that moment, according to the table presented below.

According to the view of the nurses interviewed above, it was possible to show that the professionals have knowledge about the importance of DOT. Since the majority stressed that this moment is fundamental, it favors the team's bond with the tuberculosis patient, in

Table 1. Description of category 2 correlated to the respective subcategories and frequency according to the interviewees' statements. Cajazeiras – Paraíba, 2016.

SUBCATEGORY		F
Monitoring medication intake	"[...] the treatment is important to be observed, because I will know if the patient is taking the medication [...]" (E - 1) "[...] Also, having a control of the shots, knowing that the patient is taking them correctly [...]" (E - 16)	04
Identification of adverse effects	"[...] helps us to identify if the patient has adverse effects [...]" (E - 4) "[...] because there are a lot of patients who have gastric pain, so they have to guide them about food, and also follow-up, right [...]" (E -5)	07
Improving patient care	"Because I will provide better quality care to the patient, and be closer to the community, right, the PSF and the professional. (E - 10) "[...] I think it is of great importance because it improves patient care [...]" (E-6)	02
Interruption of the transmission chain	"I consider it important because it avoids the abandonment and contamination of other people, avoiding the chain of transmission [...]" (E-4) " [...] and the question of interrupting the transmission to other people." (E-6)	02

Follow-up of the clinical picture	"[...] And it also helps professionals to monitor the evolution of the disease, if the medication is working." (E-4) "[...] we can have this greater monitoring, if it is a patient who is progressing well [...]" (E-12)	07
Abandonment prevention	"Yes. I consider it important because it is a way for people not to ... not abandon treatment [...]" (E-2) "It is important, so as not to discourage, in the face of the first improvements, he does not give up, so he does not abandon [...]" (E-7)	08
Prevention of drug resistance	"[...] it doesn't take right and this resistance happens, you know, isoniazid mainly [...]" (E-9) "[...] it helps him not to abandon treatment, avoiding complications such as drug resistance, you know." (E-11)	04
Total		34

addition to the possibility of knowing whether the patient is using the medication, as well as monitoring the taking of these doses, identifying the adverse factors and resistance to any of the drugs. It was also emphasized that these are essential factors to avoid abandonment and especially to monitor the patient's progress in the face of TB.

DISCUSSION

As we can see, most of the professionals interviewed had more than 5 years of professional activity and had postgraduate degrees in the area of expertise. This data is important, because the length of professional experience and qualification can be factors that help professionals to develop skills and have a more critical view on this subject.

Competences are based on: knowledge, skills and aptitudes, in which the subject is able to mobilize cognitive resources such as knowledge, practices and information in his work environment, providing him with unique and individual moments of learning.⁹ Its acquisition depends on the relationship between knowledge and individual experiences.¹⁰

In addition, the responses of the research subjects are quite consistent with the literature, assuming that professionals observe the importance of DOT, highlighting the benefits for both the

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patient and the team itself, as it emphasizes the formation of the user's bond with the FHS and the consequent prevention of treatment abandonment. This strategy is important for the process of co-responsibility and creating the bond.¹¹ It also contributes to patient adherence and continuity of treatment, since it favors the development of a relationship of trust between the subjects involved in the therapeutic process.¹²

The link between the FHS and the TB patient, especially users who abandoned treatment, contributes to the maintenance of care by monitoring the health conditions of the patient and his family, considering health in its expanded concept and the singularity of the person who abandons treatment.¹³

It can be seen that only one of the nurses associated the TDO strategy with preventing the emergence of resistant strains. The interruption of tuberculosis treatment appears frequently, after the patient shows clinical improvement, thus leading to the emergence of resistant forms of tuberculosis. Showing the association of abandonment with multidrug resistance, and the need for health professionals' knowledge, especially nurses.¹⁴

The nursing professionals considered the TDO strategy to be of great importance, citing its importance in terms of monitoring, identifying adverse effects, improving the care provided, interrupting the transmission chain, monitoring the clinical picture, preventing abandonment and preventing drug resistance.

The nursing professionals considered the DOT strategy to be of great importance, citing its importance in terms of monitoring, identifying adverse effects, improving the care provided, interrupting the transmission chain, monitoring the clinical picture, preventing abandonment and preventing drug resistance.¹⁵ As for unsupervised treatment, abandonment is only detected only when the patient misses the appointment, or admits that he is not taking the prescribed medications or when he fails to withdraw his medi-

cations, which results in the delay in the intervention of the health team's action.¹⁶

The effects of drugs and reactions to treatment involve important issues for adherence. One of the factors associated with treatment abandonment is the side effects of medications, such as nausea and vomiting.¹⁷ In addition, adherence to treatment also includes a process that involves behavioral, psychological and social aspects, and requires decisions and responsibilities shared in a multidimensional way, between user, health team and social support network, with an

approach that meets the singularities of individuals.¹⁸

CONCLUSION

The realization of this study provided greater knowledge about the importance of carrying out the DOT from the perspective of the interviewees. Since, it was evidenced that some professionals have knowledge about the importance of ODD, because through the team bond with the tuberculosis patient, it is possible to know, for example, if the patient is taking the medica-

tion, perform the monitoring of the shots, identify the adverse factors, avoid abandonment and mainly monitor developments.

However, it is worth mentioning, as noted, that although tuberculosis is an old disease, there are still many flaws in the effectiveness of its control and especially in the battle against treatment abandonment, highlighting the need for organization of the service in the FHS, training of health professionals in units and also the extinction of stigma and prejudice on the part of users, family members and the population in general. ■

REFERENCES

1. World Health Organization. Data Global tuberculosis report 2016. Geneva: WHO; 2016.
2. Dalcolmo M P, Andrade M K N, Picon P D. Tuberculose multirresistente no Brasil: histórico e medidas de controle. Rev. Saúde Pública [Internet]. 2007 Sep [citado em 2021 Jan 13]; 41(Suppl 1):34-42. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-89102007000800006&lng=en
3. Ministério da Saúde (BR). Secretaria de Vigilância em Saúde. Brasil livre da tuberculose: evolução dos cenários epidemiológicos e operacionais da doença. Bol Epidemiol [Internet]. 2019 mar [citado em 2021 Jan 13]; 50(9):1-18. Disponível em: <https://portalarquivos2.saude.gov.br/images/pdf/2019/marco/22/2019-009.pdf>
4. Ministério da Saúde (BR). Secretaria de Vigilância em Saúde Manual de Recomendações para o Controle da Tuberculose no Brasil. Programa Nacional de Controle da Tuberculose. Brasília: Ministério da Saúde; 2011.
5. World Health Organization. The Stop TB Strategy: Building on and enhancing DOTs to meet the TB-related Millennium Development Goals. Geneva: World Health Organization; 2006.
6. World Health Organization - WHO. Stop TB Partnership. The global plan to stop TB 2006–2015 [Internet]. Geneva: World Health Organization; 2006 [cited 2021 Jan 12]. Available from: https://www.who.int/tb/features_archive/global_plan_to_stop_tb/en/
7. Ministério da Saúde (BR). Secretaria de Vigilância em Saúde. Departamento de Vigilância Epidemiológica. Tratamento diretamente observado (TDO) da tuberculose na atenção básica: protocolo de enfermagem. Brasília: Ministério da Saúde; 2011.
8. Bardin L. Análise de Conteúdo. Lisboa, Portugal: Edições 70, L D A; 2016.
9. Zabala, A. Como aprender e ensinar competências [recurso eletrônico]. Porto Alegre: Penso, 2014. E-PUB.
10. Fleury MTL, Fleury A. Construindo o conceito de competência. RAC. 2001;(esp):183-96.
11. Yamamura M, Martinez T R, Popolin M P, Rodrigues LBB, Freitas IM, Arcêncio RA. Famílias e o tratamento diretamente observado da tuberculose: sentidos e perspectivas para produção do cuidado. Rev. Gaúcha Enferm. [Internet]. 2014 June [citado em 2021 Jan 14];35(2):60-66. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1983-14472014000200060&lng=en. <https://doi.org/10.1590/1983-1447.2014.02.42741>
12. Sá, LD, Oliveira AAV, Gomes ALC, Nogueira J A, Villa TC S, Collet N. Cuidado ao doente de tuberculose na Estratégia Saúde da Família: percepções de enfermeiras. Rev. esc. enferm. USP [Internet]. 2012 Apr [citado em 2021 Jan 14]; 46(2): 356-363. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0080-62342012000200013&lng=en. <https://doi.org/10.1590/S0080-62342012000200013>.
13. Souza KMJ, Sá LD, Palha PF, Nogueira J A, Villa TCS, Figueiredo DA. Abandono do tratamento de tuberculose e relações de vínculo com a equipe de saúde da família. Rev. esc. enferm. USP [Internet]. 2010 Dec [citado em 2021 Jan 14]; 44(4): 904-910. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0080-6234201000400007&lng=en. <https://doi.org/10.1590/S0080-6234201000400007>.
14. Batista IAM, Rodrigues L, Almeida RT, Menegócio AM. O Papel do Enfermeiro na Prevenção da Farmacorresistência das Micobactérias Tuberculosas Entre os Pacientes Alcoólistas. Ensaios Cienc., Cienc. Biol. Agrar. Saúde. 2015; 19(2): 65-74, 2015.
15. Cecilio HPM, Marcon SS. Tratamento diretamente observado da tuberculose. Rev enferm UERJ, Rio de Janeiro, 2016; 24(1):e8425.
16. Ferreira AAA, Queiroz KCS, Torres KP, Ferreira MAF, Accioli H, Alves MSCF. Os fatores associados à tuberculose pulmonar e a baciloscopia: uma contribuição ao diagnóstico nos serviços de saúde pública. Rev Bras Epidemiol. 2005 Jun; 8(2):142-9.
17. Sá AM, Santiago LA, Santos NV, Monteiro NP, Pinto PH, Lima AM, Iwasaka-Neder PL. Causas de abandono do tratamento entre portadores de tuberculose. Rev Soc Bras Clin Med. 2017 jul-set;15(3):155-60.
18. Ferreira RCZ, Ramdohr Sobrinho EC, Zóia EN, Figueiredo RM. Perfil epidemiológico da tuberculose em município do interior paulista (2001- 2010). CuidArte Enferm. 2013 Jan/Jun;7(1):7-12.