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CONCEPTS OF NURSES ON SUPERVISED TREATMENT OF TUBERCULOSIS IN BRAZIL

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ABSTRACT

Objective: To analyze the conception of the primary care nurses about the viability of supervised treatment for tuberculosis. **Methods**: This was an exploratory descriptive study with 11 nurses. The interviews were recorded, transcribed and the data were organized in facilitators and hindering for supervised treatment. The Ethics Committee on Research in Human Beings, opinion No. 112.520, approved the study. **Results**: The nurses considered the small number of professionals, the lack of community healthcare agents, lack of in-service education and communication problems with the reference center as complicating the viability of supervised treatment and identify that the bond facilitates the adherence to treatment as well as the flexibilization in time of taking the medicine, the care incentives such as basic food, vouchers, milk donation in addition to medication availability. **Conclusions**: The findings of this study indicate that high demand and diversity of actions on the responsibility of the nurse, associated with reduced number of professionals, hamper the attention to supervised treatment, and suggest adjustments to increase their effectiveness, as more training and space for professionals to exchange experiences, acknowledge the effectiveness of a treatment modality for tuberculosis.

Descriptors: Tuberculosis; directly observed therapy; self-administration

INTRODUCTION

The tuberculosis (TB) despite cured since the 1940s, with the use of pyrazinamide and streptomycin, still worries authorities around the world since the high rates of the disease, intrinsically linked to the poor economic and social conditions of the population (World Health Organization [WHO], 2006). Although there are therapeutic schedules that have superior efficacy to 95%, there is still a significant number of people who do not adhere to treatment (Vieira & Ribeiro, 2011), contributing to the TB be considered a serious public health problem (Abreu & Figueiredo, 2013).

Several factors have been reported as a cause of poor adherence to treatment, which include low investment in maintenance and financing of programs, lack of knowledge and motivation of health professionals, and the difficulty of access to health services of the population vulnerable, such as unemployed, homeless, chronic alcoholics and drug users (Villa, Ruffino-Neto, Arcêncio & Cardozo-Gonzales, 2006).

In Brazil, the Ministry of Health recommends the implementation of the strategy Direct Observed Treatment Short-course (DOTS), since 1996 (Villa et al., 2006), however the World Health Organization recognizes the need to expand the use of supervised treatment (WHO, 2006), as the DOTS has been considered one of the key measures of treatment of TB, out to be effective in increasing cure rates and decrease dropout rates (World Health Organization [WHO], 2005).

The DOTS strategy, including the heterogeneity of each locality can work closely to achieve global targets for TB control, corresponding to the detection of cases (70%) and treatment success (85%) of them (Villa et al., 2007). In this perspective, the expansion of DOTS for primary care has been a strategic priority for TB control, however, has occurred slowly and gradually due obstacles as unprepared professionals, lack of human and institutional resources and the organization of service actions with a view centralized and fragmented process (Yin, 2005). In this regard it is worth noting the participation of professionals and their interpretation of the role they play in this process (Hino, Santos, Villa, Muniz & Monroe, 2005).

It is essential to understand how the actors engaged in the DOTS act and react to therapy, particularly health professionals, whose performance directly affects the effectiveness of treatment. The interaction of these professionals and patients, the knowledge that have about the disease and treatment, may influence individual behavior opposite to TB treatment (Hino et al., 2005; Ferreira, Sobrinho, Zóia & Figueiredo, 2013).

In order for DOTS to be an effective mechanism to extend the cure rate of the disease and thus achieve global goals, it is essential to investigate the interfaces involved. Consequently, look beyond the perspectives of individuals in treatment, health professionals, including particularly the nurses.

Given the above, this study aims to analyze the design of the nurses of primary health care on the feasibility of supervised treatment for TB, identifying and describing their perceptions of the facilities and operation of the same barriers.

METHODOLOGY

It was an exploratory descriptive study of qualitative approach, using the method of study of Case (Ministério da Saúde, 2011). The option for the qualitative approach was due to the intention to understand the phenomena from the perspective of the professionals studied, about its design the viability of supervised treatment for TB in the city.

The method of case study, in turn, was considered the most appropriate in view of the clear need to understand complex social phenomena, in this case, the perception of nurses and the operationalization of facilities identified by them to the DOTS in the units.

The survey was conducted with nurses in Basic Health Units - BHU the city of São Carlos--São Paulo being invited to participate in the study nurses responsible for 12 BHU, 11 who accepted the invitation, which were identified with the symbol (E) and listed randomly.

Data were collected through interviews, which in addition to data on the professional profile (age, sex, working time in the unit, training on DOTS and others) had the following question: "In your opinion what's viability realization of the supervised treatment at the BHU of São Carlos?" the interviews were conducted in January and February 2013, recorded and later transcribed.

The data collected were organized around six subjects namely: lack of human and material resources; failure in continuing education and communication difficulties with the reference center, as difficulties, and increased adherence to treatment, the bond and the availability of the drug, as facilitators.

The study was approved by the head of the municipality of Primary Health and by the Ethics Committee on Research in Human Beings of the Federal University of São Carlos - São Paulo, Brazil; Opinion No. 112.520 and the research was conducted according to the standards established by Resolution 196/96 of the National Health Council.

RESULTS AND DISCUSSION

With regard to the characterization of the respondents were predominantly female, 10 women and one man; mean age of 36 years, ranging between 31 and 45 years.

In professional service time in BHU, the average was eight years, ranging from 1 to 17 years. As for the training time, it was found that five subjects completed their courses for over 10 years and the other with a predominance of eight years.

The nurses pointed out the lack of human resources and materials as the main barrier in the implementation of DOTS. The following statements confirm this idea.

(E2) [...] then in BHU DOTS work is complicated, because you do not have one, two employees, you do not have that team ... you do not have an agent participating, you know? You do not have visiting agent, you don't, it's all very dispersed in BHU.

(E7) is feasible since it has the staff to meet the demand of the population.

(E1) [...] we cannot afford to do the BHU HV (home visits). We have no transportation, do not have enough staff and everything.

The difficulty in operationalizing the DOTS includes the lack of human and material resources, failure to continuing education on TB involving health professionals and limited communication with the reference center.

The reduced number of professionals in the health services may compromise the planning and execution of activities and/or programs, with possible damage to the relationship between health professional and the patient/family. Such conditions can impair the organization of the work process, as well as the response capacity of the service, in addition to promoting the fragmentation of care to the patient (Yin, 2005).

The interviewees in this study, pointed out that the responsibility to develop different programs in BHU entails a heavy workload, with consequent lack of time to plan and implement DOTS. The sections below describe the issue.

(E7) The activities are dumped into the Base Unit, then everything comes to unit, then comes urgency [...] needs to develop all programs, more the urgencies ... specialties has been for Units then you get the tight time, but we have managed to do here in the Unit. The problem is the overload of the Units facing the population that it has, and the neighborhood that it has to meet, so there's a huge demand.

The work process of the Primary Health Care teams should be planned according to the guidelines established in the National Primary Care Policy (NPCP). In order to plan and implement activities according to the health needs of BHU's operating territory, targeting actions on collective and individual sphere, which includes the promotion, prevention, diagnosis, treatment, rehabilitation, harm reduction, and the maintenance of health. Such actions are intended to promote comprehensive care, continuous and organized to the population. Furthermore, it is important to develop intersectorial action in order to provide comprehensive care to the population.

Concerning the lack of material resources such as lack of disposable cups and vehicles available to conduct home visits and/or make active search for missing, causes the professionals have to deal with patients and with other services strategies to solve the weaknesses present in the organization of health services. The lack of human and material resources can compromise the involvement of health professionals to TB control actions, and therefore the resolution and quality of services offered.

The NPCP provides home care, as well as the active search and the notification of local importance diseases, such as TB. Thus, BHU play a central role in ensuring access to quality care. The DOTS strategy recommends that treatment be carried out according to the needs of the patient. Thus, the lack of human and material resources shown in the studied BHU turn against the guidelines of the assigned policies (Ministério da Saúde, 2011).

The choice of DOTS modality should be agreed between the healthcare team and the patient, considering the reality and the healthcare structure to the existing health. However, there is a mismatch with what is recommended by the DOTS strategy and the conduct adopted at BHU, as it is not given the right of choice to the patient, ie, this has to fit the determinations of health services and perform the supervised treatment in the nearest health unit of the patient's residence (Caliari & Figueiredo, 2012).

The planning of actions performed in health facilities should be monitored and evaluated in order to readjust the process of work, according to the needs of the region as well as qualify the models of care and management of health services, aiming at continuity of care.

In order to conduct a comprehensive care with the patient with TB, the professional needs to have knowledge about the disease and ways of treatment. However, according to the testimony, it is evident the ignorance of some professionals about the potential of the DOTS strategy, and above all of the constituent components, such as: lack of dialogue with patients about the difficulties in treatment, rigidity of hours of consultations scheduled in the Reference Center and medication administration. The excerpts below illustrate these components:

(E1) We did a four and a half months job and the person didn't go to the query that was in December, then she stayed December integer without the drug [...] I call, schedule a new query and there is no other time? No, it's 7 am the time the doctor comes. But there's no way the doctor change this time of his because he knows that's not working. No, there's no way, the time he can meet is this.

(E1) With the entire network since the doctor because it will decentralize then it will not have the specialist, an infectious disease specialist in the case. And the general practitioner often he does not know what extent to take, you know? Both the general practitioner, the nurse, the technicians and nursing assistants, everyone in the network has great difficulty in comprehension and understanding of the transmission mechanism and everything.

According to the interviewees, are usually held meetings, but the problems identified and decisions made are not implemented in the health service daily. Given these aspects is essential to develop continuing education.

(E2) We had a meeting and have been raised which are the difficulties to be performing DOTS like this, and one of the issues was, the one that was on the question of the worksheet, if it hadn't some most effective, faster way, which would not have to take the worksheet service, I do not like taking in a document [...] the responsible for the program coordination said he would send a spreadsheet by email, but it did not come at all. That's ... I wanted to a meeting with changes, not only a meeting for nothing.

It was found, however, the ineffectiveness of the continuing education program. This context leads to a resistance by the professionals for the incorporation of the DOTS strategy. The following excerpt shows the lack of workers, including about the disease and its treatment:

(E5) Despite all the guidelines, who delivers the medication is just me and the other nurse [...] the other employees, like the assistants and nursing technicians say they will not be attending people affected by tuberculosis to catch tuberculosis disease.

Among the eleven interviewees, one said that did not receive training on TB, five said they participated in courses and / or workshops on DOTS and one participant mentioned on a skill performed by students from Federal University. Considering that training in TB plays an important role in the development of the program (Sobrinho, Freitas, Figueiredo & Caliari, 2013) considers that the workers from the BHUs studied need to participate in a continuing education program on TB and DOTS (Hino et al., 2005; Ferreira 2009; Sobrinho et al., 2013; Matumoto Fortuna, Mishima, Pereira & Domingos, 2005).

Professionals must understand the disease and its characteristics, as well as strategies used to control and disease prevention in order to carry out a planning of health actions in services. We emphasize the need for continuous training to promote awareness and motivation of health teams, with the aim of incorporating the program in health units, and this can be used diverse strategies to find plausible solutions to be used according to the needs identified in each service (Ministério da Saúde, 2002).

Lifelong learning is a key element in the work processes, as they promote the skills of health professionals and reflects the care provided to the user. The lifelong learning strategy added to the professional awareness is crucial to restructure the care model provided to patients with tuberculosis (Possuelo et al., 2012).

In addition, it was evidenced during interviews that the training carried out by the Reference Center, in general, are theoretical, evaluated as incompatible for many services, because of the complexity of the disease and the various factors that are involved in this process, not only correspond to associated disease needs. It was also noted that the capabilities are limited in time, and that there is a space for the exchange of experiences

among professionals, so the training does not promote significant changes in the process, since it does not include the practice of health services.

(E2) [...] which guarantees me that those employees are updated, only if they are on their own seek for update [...] I feel this need.

(E1) There is a lot of training that we see that is a piece of cake, you sign the attendance list and drive off, go out with the certificate and no one knows nothing [...]

Continuing education plays an important role in the labor process, since from that strategy is able to improve the health actions, both to the enrolled clients, and for health professionals, since the strategy aims to update knowledge and skills of the labor process, and above all the challenges in the daily routine of health services, to there is an ongoing teaching-learning process in the context in which the professional is inserted. The difficulties experienced by these professionals at work every day can be resolved through the development of care and management skills in primary care. In this sense, emphasizes the importance of alternative actions, such as study groups, case discussion, exchange of experience and systematic studies among professionals seeking ways to meet the needs of the team context (Ministério da Saúde, 2011).

Another important aspect identified based on the statements of the interviewees was the ineffective performance in the Reference Center support with the units, as can be seen in the following excerpts:

(E9) I think the TB Department cannot abandon the patient's responsibility to us, they often don't give the patient's information with regard to the address, the phone number.

(E7) We do not have much contact. Pass the worksheet monthly, they send the medication, send spreadsheets and we pass the data. The contact that we have is this more.

(E2) The difficulty of coordination is only towards people be sending these spreadsheets, eg. and this worksheet astray, you know? Go the treatment by water at low [...] is not a difficulty from the coordination so, DOTS, and TB, it is our system. I guess I should have something by email to pass (the spreadsheets).

The counter-reference is important in the planning of TB actions. The integration of health services depends on an effective communication system, where there is exchange of information among professionals involved in the process. In order to form an integrated network of services is essential to have the reference and counter-reference involving the three levels of complexity in health (Assis et al., 2012).

Reference is made from the less complex level to more complex to allow a specialized service, in contrast to counter-reference is held to the contrary, in order to provide appropriate information to the facility to which the patient will be referred to follow up during treatment (Assis et al., 2012).

Health professionals point the lack of counter-reference as a barrier to implementation of DOTS, since it is an essential element for the integration of health services. BHUs' Nurses express the importance of counter-reference for health services and patient in order to facilitate the incorporation of supervised treatment in routine activities performed by these services.

In addition, it is essential the partnership with the reference center to provide support to the health facilities and also conduct continuous supervision in order to detect weaknesses in the implementation of the strategy. The supervision of the TB program coordinator should occur to stimulate and motivate professionals to strengthen their actions in TB control (Khan, Walley, Witter, Shah & Javeed, 2005) and, above all, contribute to the resource capacity building to address the disease.

Facilitators points

Health professionals recognize that the bond facilitates treatment compliance and they propose alternatives for their maintenance as, for example, more flexible time taking the medicine for the patient work. This aspect is shown in the following excerpts:

(E1) [...] strengthen the bond in the following manner, is guiding him (patient) about the importance of treatment so that him can have confidence in our work, and that it is not only he has confidence in the work, but has to know the importance of treating him because who will be harmed will not be us, will be himself, so we try to use it in a very simple language for them and let them totally at ease.

(E8) is every morning, depends on the patient, for example, he comes to work enters at 9, 8:30 then him's here, take the medicine and goes to work, so if a patient is late, there we combine a time in the afternoon and then he is attended as soon as he arrives.

(E10) (TS) usually they come in the morning, there are two that work and they prefer to come later at lunchtime, but they come and it's like this, we already know who are the patients and we do not let them waiting.

(E5) I think that the he coming to the unit, I think sometimes he gets tired to come every day, and he has to come, so there are users who do not come at any fasting, comes like, in the afternoon. The guidance that we have is to give the medication anyway, do what you know, what cannot happen if to stay without, but they have their own lives, work, and family.

According to health professionals interviewed in this study, the relationship with patients is critical to ensure adherence to treatment, since they have strategies to keep patients under supervision, such as flexibility in schedules for supervision of medication and / or the provision of incentives. Therefore, it is necessary to strengthen the bond during the service, seen that in these meetings is possible to identify the vulnerability of patients in order to avoid the abandonment of treatment (Palha et al., 2012).

One can see that the professional recognizes the uniqueness of each patient creating alternatives to the DOTS don't be a barrier to everyday life.

The flexibility of the teams and the consent with the choices of patients have essential role in the accession process to the treatment (Palha et al., 2012). According to the authors the propose user-centered intervention is a major challenge for the Tuberculosis Control Program, which process is delineated with vertical structures without considering the difficulties/needs of individuals. It is noteworthy therefore, that awareness and the team from co-responsibility are key elements in the implementation of supervised treatment (ST), and the success for TB control. Thus, it is important to educate all staff on the strategy in order to achieve the proposed objectives. In this context, figure to continuing education as an essential tool for updating the contents inherent to professional practice.

Another aspect reported as facilitators to patient adherence is the incentive assistance, such as basic food basket, vouchers, milk donation (from the municipal milk program), among others, according to the needs presented by the patients. The following excerpts illustrate this issue:

(E1) They get (basic food basket), but it's not mandatory gain, is the CEME that via this donation they receive, there's no money for it, you know, a donation of a person that on the next month say that won't give that month, she simply does not donate and people do not stay, you know. Then we try to select people who are most vulnerable financially.

(E1) The CEME receives a donation (basic food baskets) of some patients [] that donates 50 basic food baskets to be distributed to people who do the treatment, and a few months comes to us, few months don't, then they distribute, they make a distribution maybe a little random to don't benefit anyone in particular.

(E5) They have the pass, earn basic food basket, has some earning up vegetables, and fruits as well.

However, the uneven availability of care provision can result in demotivation of patients reflecting in the planning, execution and supervision activities mainly on patient compliance to the therapeutic process.

The Ministry of Health recommends the construction of the link between health professionals and the patient and of these, with the health service. In addition, emphasizes the importance of breaking the barriers to treatment adherence, as the use of strategies to social rehabilitation, and offering incentives such as: snack, food assistance, transportation--pass and others, as motivation for the accession of users to the treatment regimen (Caliari & Figueiredo, 2012).

The Tuberculosis Control Program from the city does not have financial resources for the maintenance of these accession strategies mentioned above.

According to the interviewees, the 50 basic food baskets provided regularly come from donations made by third parties. In other units shows the unfolding and creativity of professionals to provide patients other features such as the delivery of surplus milk program and the supply of vegetables and fruits offered by traders in the region. The distribution of basic food baskets is performed via Reference Center for families in greater social risk, however, this distribution occurs randomly in order to don't go in favor of any particular family.

Another aspect listed by health professionals is the closeness of users to health services and the availability of medication.

(E4) They do the ST in the nearest unit from his residence, then he (the patient) does not need to walk the whole town to get medication.

(E9) I think it's quite feasible because it facilitates to the patient, the nearest unit of his residence.

(E8) Facility is the medication that comes rightly, it doesn't need to be asking, the TB service from CEME I guess it is very responsible about it, you know, charge us, sends the right things [...] the patient can come here for us to know if he is treating himself, because it's here all day [...] so it's being effective [...]

(E10) [...] the patient goes to the CEME, passes by the infectious disease specialist, and there they (Reference Center), through the driver, send the medication to us, so it has this facility, so we do not need to be calling to say that the medication is finishing... the patient already has the date marked the return, and there they automatically send the medication.

Health professionals pointed accessibility of individuals to health services, as a facilitator for compliance. However, it is important to note that a number of factors can impede access to the service, such as the clinical manifestations caused by the disease and the socio-economic condition of the large numbers of patients (Palha et al., 2012). These issues can represent a barrier to accessing services since that they rely on public transport or third-party collaboration to move to the Unit. Thus, the Program for Tuberculosis Control has financial resources to obtain vouchers for users who need such assistance.

The availability of drugs for the treatment of TB is listed by the interviewees as a facilitator in the BHU work process in order that patients follow a flow of care in care network to the city's health, so that the supervised treatment is performed the closest BHU of the residence of the subject. One must consider, however, that with the decentralization of TB actions, it is essential to reflect upon the organization of health services in order to ensure individual care planning and collective (Palha et al., 2012), and using relational tools to ensure treatment success. This is in addition to the delivery of drugs, the DOTS strategy covers the individual care, his family and community, aiming to the treatment, the prevention of new cases of TB and the promotion of the covenant for life.

CONCLUSIONS

The findings of this study indicate that the nurses considered the small number of professionals, the lack of community health workers, lack of in-service education and communication problems with the reference center as complicating the feasibility of supervised treatment for TB in their units. Also indicate that the high demand and diversity of actions on their responsibility contribute to this difficulty. On the other hand recognize this mode of treatment as effective, even suggesting adaptations to increase its effectiveness.

Studies of this nature, which assess the local reality and the perception of the teams involved, are essential to support the assessment of the strategies adopted so far and propose more effective measures.

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