

Social Support for Success of Medication in Patients With TB MDR in Rumah Sakit Paru Dr. Ario Wirawan Salatiga, Central Java

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Abstract

Tuberculosis is an infectious disease caused by *Mycobacterium tuberculosis*. In 2015, incidence of pulmonary tuberculosis in Salatiga ranks at 4th. The treatment occurs for about 6 – 8 months makes patient sometimes do not take the medicine regularly, which raised new problem that resistance to anti-tuberculosis drugs. The purpose of this study was to determine how the role of people those closest to the patient in order to support the treatment undergone by the patient, especially in the supervision of drug consumption and how the forms of the support given to patients that affect the treatment. This study used qualitative method with case study approach. Participants were 8 people divided into 3 groups. Data obtained through depth interviews with family or the closest people who directly involved the patient during treatment period. The data were analyzed by content analysis. The results showed that social support less influence the success of treatment in patients with MDR TB.

Keywords : Tuberculosis, MDR, Social Support, Supervision

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Introduction

Tuberculosis or it is mostly known by all people as TBC refers to a transmittable and infectious disease which is caused by *Mycobacterium tuberculosis*. Commonly, tuberculosis attacks to pulmonary organ rather than other body organs. This bacterium is contaminated from the air which takes along droplet nuclei of the tuberculosis client (Girsang et al., 2011; Izzati et al., 2013; Lisdawati et al., 2010; Syam et al., 2013). According to the data from WHO 2012, Indonesia was positioned on fourth world rank of tuberculosis rate which reached to 0,4 – 0,5 million people (Reviono, Kusananto et al., 2013; Siswanto et al., 2012). In 2015, the incident of pulmonary tuberculosis in Central Java reached to 115,7 per 100.000 people and specifically Salatiga was ranked in fourth rank of Central Java with 323,13 cases per 100.000 people (Dinas Kesehatan Provinsi Jawa Tengah [DKP Jateng], 2015). The treatment of

tuberculosis required 6 – 8 months for the clients, it affects some clients did not consume to the medicine in discipline and caused to new problem, that the clients would be resistant to the anti-tuberculosis medicine. The tuberculosis which was resistant to the anti-tuberculosis medicine impacted from the inadequate treatment, unregulated medicine schedule, inadequate evaluation coverage, and irregular medicine supply. Along 2011, the case of Multi Drugs Resistant (MDR) reached to 260 total cases in Indonesia. TB MDR referred to the case of tuberculosis which was resistant to isoniazid and rifampicin, with or without anti-tuberculosis medicine of other first line, like HR, HRS, and HRES resistant. Based on WHO, in 2010, Indonesia was ranked in 8 world rank relating to the case of TB MDR. Moreover, the data of WHO in 2008, the rate of death which was caused by TB MDR reached to 150.000 cases (Izzati et al., 2013; Kementrian Kesehatan [Kemenkes], 2013; Reviono, Kusnanto et al., 2013; Sri et al., 2010).

On the case of TB MDR treatment, due to the Guideline for the Programmatic Management of Drug Resistant Tuberculosis, WHO reported side effects which might be appeared on the clients such as nausea and vomit, arthralgia, psychological disorder like anxiety and depression, renal disorder, hearing impairment, sleep disorder, hypocalcemia, hyperuricemia, diarrhea, and pain of drug injection (Reviono, Kusnanto et al., 2013; Sri et al., 2010). The inadequate treatment of TB MDR would raise to the risk of Extremely Drug Resistant (XDR) and Total Drug Resistance (Total DR), TB XDR refers to TB MDR which is followed by resistance to one of drugs of fluorokuinolon class and one of tuberculosis drug resistance of second line injection (kapreomisin, kanamisin, and amikasin), while TB Total DR refers to a case where the client is resistant to all kinds of drug of tuberculosis resistance (Burhan, 2010; Kemenkes, 2013).

The treatment of TB MDR requires to longer period of time than TB pulmonary disease, it is approximately 18-24 months. Therefore, it needs to personal motivation from the client to have the treatment in regular. The supervision of drug consumption on the client of tuberculosis from the client's family and surrounding has greater effect than the health officers. To keep obedience of the client of TB to get treatment will help decreasing the rate of tuberculosis infection on the

environment, declining risk of recurrence, hampering microbe growth, and reducing bacterial resistance to the drugs, so it can improve the rate of client's recovery (Murtiwi, 2006).

Naturally, human is social creature that cannot live alone. The physical needs (clothing, food, and housing) and social needs (relation, acknowledgement, and psychological need includes to safety, curiosity, and religiosity) cannot be fulfilled without any help from other human (Hastuti et al., 2014). When an individual is in trouble, either in big or little problem of life, he will look for social support from people surround him in order to get feeling of to be loved, cared, and honored (Hastuti et al., 2014). The client of TB also needs to similar social support, it is hoped to be able to reduce the psychological burden relating to the disease (Hastuti et al., 2014). In fact, people are in fear of contacting and communicating with the client of pulmonary tuberculosis, although, they are his own family. This condition can emerge to other problems on the client of tuberculosis (Hastuti et al., 2014). The common and frequent manners that showed by people to the client of tuberculosis like being careful in excessively by isolating the client, refusing to talk with the client, and closing the nose when get closer to the client of tuberculosis (Hastuti et al., 2014). Those manners or attitudes can affect to the physical condition of the tuberculosis client, which can offend and bring up depression feeling as well as isolation on the client (Hastuti et al., 2014). Hence, the social support is very needed by the client of tuberculosis during treatment in order to reduce treatment failure which caused by treatment despair. The social supports is considered as a role or influence or help from closest people which is beneficial and worth to prevent threats of mental health, strengthen psychological condition, and decrease level of anxiety (Syam et al., 2013) .

Based on the phenomena, the researcher wants to know the role of those close relatives and friends from the client to give support and take role in the treatment, particularly within drug consumption supervision and other kinds of support to the client of TB MDR which can influence the success or even failure of client recovery and treatment. This study has differences with some previous studies (Izzati et al., 2013; Reviono, et al., 2013; Sri et al., 2010), the researcher exerts this study on three participant groups which consist of the group of family or close relatives and friends from the TB MDR

client who dropped out from the treatment, the group of family or close relatives and friends from TB MDR client who got therapy, and the group of family or close relatives and friends from the TB MDR client who were declared to be recover. This research was also conducted in Salatiga and used a qualitative design with a case study approach. The dependent variable of the study was medication compliance, while the independent variable was social support.

Method

Design

This research exerted qualitative research method and case study approach. The inclusion criteria in this research were clients and family or close people to the clients who were confirmed of ever being or was suffering tuberculosis MDR and lived in Salatiga and surroundings and the client age was 25 years old and had ever underwent treatment or medical checkup in a hospital, specifically Rumah Sakit Paru Dr. Ario Wirawan (RSPAW) Salatiga, Central Java. The exclusion criterion was the clients or close relatives or friends who were not willing to involve within this research. Inform consent was delivered to all participants to joint in this study.

Participants

The participants who were taken in this research 8 clients that were divided into three groups, as they are: group of family or close relatives or friends from the clients of TB MDR who dropped out from the medical treatment, group of family or close relatives or friends from the clients of TB MDR who were undergoing therapy, and group of family or close relatives or friends from the clients of TB MDR who were clarified as being recovered. The total participant was determined based on the data of TB MDR clients who ever had medical checkup and treatment in Rumah Sakit Paru Dr. Ario Wirawan (RSPAW) from 2014 to 2017. The techniques of data sampling in this research were in-depth interview to the family or close relatives or friends from the clients who directly involved when the clients were in medical treatment and observation of medical checkup result of the clients in Rumah Sakit Paru Dr. Ario Wirawan (RSPAW) Salatiga who clarified that the clients were suffering TB MDR disease or assured the clients' recovery condition.

Data analysis

The technique of data analysis was content analysis, which meant that the process of data analysis was started by writing result of interview, clarification, and interpretation and presentation within description design. The data validity exerted technique of source triangulation. Further, this research was executed in Rumah Sakit Paru Dr. Ario Wirawan (RSPA) and clients' residence along March – April 2017.

Result

The total number of participant who fulfilled the inclusion and exclusion criteria of research was 8 participants, which particularly 2 participants for the group of family or close relatives from the clients of TB MDR who dropped out from the medical treatment, 3 participants for the group of family or close relative from the clients of TB MDR who were asserted of being recovered from tuberculosis, and 3 participants for the group of family or close relatives from the clients of TB MDR who were undergoing medical treatment. Due to the condition of clients' disease, it demanded the clients of tuberculosis to get treatment in long time like TB MDR, where sometimes it might cause the clients to have difficulty to finish all treatments and hard to get fully recovered.

The clients needed support from the close people around them like family. Besides, the clients of TB also required to attention from surrounding people, since if only they got rejection from the surrounding because of their disease, it would affect to the psychological condition of TB clients and cause to drop condition on the clients' body.

Based on the research findings, it was found that the most social support was given in form of clients' condition acceptance in way of medical treatment support. All participants agreed that they certainly need people to accept their condition and support the treatment, so the clients would not feel as being isolated or excommunicated because of the disease. 7 participants stated that they were involved in

on-scheduled drug consumption and reminded the clients of TB MDR to consume the drug. The following is an excerpt from the participant's verbatim:

“P1: Not shunned, just be careful”

“P3: "Yes, every people in this area was support my mom in her treatment”.

“P7: when she took medicine, I was always there. I always set an alarm to remind the schedule to take medication regularly”.

The other 6 participant also helped looking for the treatment destination or medical information. Moreover, it was revealed that the mostly support which can be delivered by the participants to the clients of TB MDR was accompanying them to go for treatment, getting involved within the clients' treatment, arranging diet for the clients, visiting the clients, taking care of clients during in hospital, helping to deliver food, giving motivation and encouragement to the clients to finish the treatment, giving spiritual support and praying for the clients, providing room for the clients which had better air circulation, striving for the sun to get in the clients' treatment room and keeping room cleanliness based on the doctor recommendation, helping the clients to take a bath, and also providing milk to the clients in every morning as an effort to improve the clients' condition, recommending of coconut water drink in every morning, supplying herbal potion as additional supplement for the clients, trying to reduce and heal the medical treatment effects on clients by inviting them to take a short walk, and equipping mask to the clients and people who directly interacted to the clients of TB MDR.

The following is an excerpt from the participant's verbatim :

“P7: Oh well, we take care of each other. I always remind my wife to wear a mask even at home. if someone visits, I always give him one mask at a time. At our home now, my wife has special room that is in accordance with the doctor's recommendation. The room must be exposed to lots of sunlight, has good circulation then kept clean. I provide that. my wife sleeps alone.”

“P1: Food is also provided by the community.”

Due to the research findings, it was known that the social support which was presented to the recovered clients (P1, P2, and P3) was fewer than the social support on the clients who dropped out from the treatment (P4) who specifically got all aspects of social support. Further, the lower social support was also obtained by another client who dropped out from the treatment (P6), the client only got two of five categories of social support, emotional (like praying for patients, visiting patients in the hospital or home, and does not exclude the patient) and instrumental support (give some food for patients and her family). In particular, the category of social support which was frequently given to the clients was instrumental support. See figure 1 below.

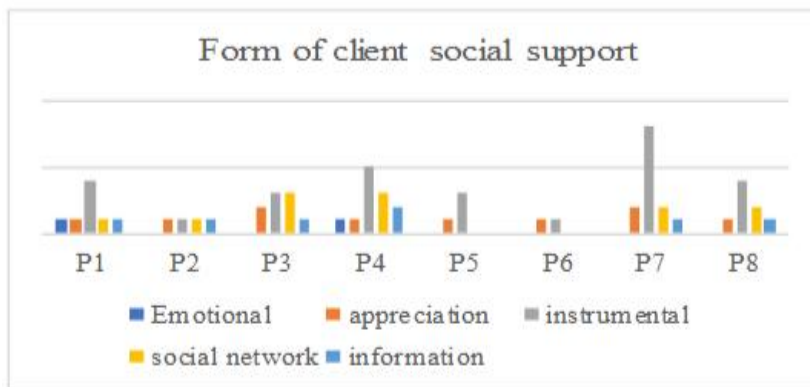


Figure 1. Respondens' social support score

Discussion

Social support refers to a form of support or help from other people in human life which aims to make individual feels appreciated, loved, regarded, and saved (Nurmalasari, 2015). There are five types of social support according to House, they are emotional support, appreciation, instrumental, social network and information (Hastuti et al., 2014).

Emotional support refers to a support which involves expression of empathy and attention which can raise feeling of convenience, love, and attention for individual (Kumalasari, 2012). In this research, it is found that the emotional support on the clients of TB MDR is given through spirit and encouragement to accomplish all kinds of treatment. The decline of clients' spirit to have treatment is caused by physical pressure during the period of treatment that can influence sustainability of treatment and give risk to the failure of treatment or dropping out from treatment.

Appreciation support refers to a form of acceptance for individual that can be given through expression, positive assessment, and encouragement to move forward (Hastuti et al., 2014). Based on the research findings, it is known that the support of appreciation on the clients of TB MDR is formed in spiritual support and positive acceptance to the health condition of clients. The spiritual support which is given to the clients is also formed in praying from people in their surroundings to hope for the clients' recovery and treatment success. Next, positive acceptance to the clients' condition is formed in no any specific social rejection to the clients when people know the clients' health condition in tuberculosis disease. This support of acceptance will make individual to feel useful and appreciated (Irnawati et al., 2016).

To heal the chronic disease like TB MDR will make people in surrounding to give various responses towards the clients' disease. The kind of responses from close people will very influential to the health condition of clients. The positive response will give psychological well-being on the clients. The support of appreciation that is received by the clients is able to improve clients' pride and avoid feeling of social isolation (Hendiani et al., 2014). However, not all clients can get positive response from people due to the health condition, some state that people in their surroundings are careless to the clients' condition or even they get rejection from people. It causes the clients to be sad and frustrated for being isolated and excommunicated by people because of the disease.

Instrumental support refers to a form of support which is expressed directly through facilitation and money (Pratiwi & Laksmiwati, 2012). Due to the research findings, it is found that the instrumental

support on the clients of TB MDR, for instance to get involved to schedule of medicine consumption and remind the clients to consume the medicine or drug, take care of the clients during treatment, arrange diet on the clients like serving fruits to the clients in everyday and ungreased and un-spicy foods, give help of food like rice and milk, equip the clients' room with the good air circulation, let the sunshine in the room and keep room cleanliness based on the doctor recommendation which aims to kill the microbe of TB, help the clients to take a bath, and deliver milk to the clients in every morning as an effort to improve the clients' condition, provide herbal potion like ginger and morinda fruit stew in mix of honey and goat milk which functions as complementary supplement for the clients, help reducing treatment effects on the clients by take the clients to short walk, and provide mask to the clients and people who might interact with the clients of TB MDR. Through many kinds of instrumental support on the clients, it can reduce level of anxiety on the clients of TBMDR relating to clients' incompetence to finish works. The clients of TB MDR will feel saved since people can be trusted and relied on to ask for help and problem solving.

Social network support refers to a form of socialization function that is given to individual through empathy which aims to develop the life sustainability with other individuals (Hastuti et al., 2014). According to the research findings, it is interpreted that the social network supports that are received by the clients of TB MDR, for example to accompany the clients to get medical treatment, visit the clients, and take care of the clients during hospitalization. The direct attention from people around the clients will rise to positive feeling. The clients will not feel alone to face the disease. Furthermore, the good social support will protect the clients from negative behaviors (Marni & Yuniawati, 2015).

Information support refers to explanation which is related to certain situation and all matters relating to the clients' problem (Pratiwi & Laksmiwati, 2012). Due to the research findings, it is found that the support of information on the clients , for instance to help looking for better treatment place, or treatment information, and get recommendation of coconut water consumption in every morning that aims to be anti-toxin on the clients. The help of treatment place will be very helpful to the clients to find and decide best treatment. The treatment place of TB MDR has special place like hospital which

have owned regiment of TB MDR drugs and get the expert medical team as well as facility of complete checkup for the clients of TB MDR (Kemenkes, 2013).

Tuberculosis or it is well known as TBC commonly attacks to the pulmonary organ. The clients of TB who do not get adequate treatment will take risk to TB MDR, where the clients will be resistant to the anti-tuberculosis drugs, like isoniazid and rifampicin at the same time (Kemenkes, 2014). TB MDR that cannot soon treated will also be risk of TB XDR and Total DR, where the clients will be more resistant to the kinds of OAT drugs (Burhan, 2010). The duration of treatment for the clients of TB MDR takes time along 18 months (Kemenkes, 2013). Particularly, the treatment recommendation is along 19 – 24 months (Kemenkes, 2014). The treatment of TB MDR has a length of time according to the result of conversion (Kemenkes, 2013). The long process of TB MDR treatment can deliver physical, moral, or material effect on the clients. The general complaint that is found on the clients of TB MDR is the expensive cost of medical treatment and long time of medical treatment that must be undergone and emergence of side effects (Sri et al., 2010). The failure of treatment on the clients of TB MDR can occur because of lack of clients' obedience during the treatment, inadequate health officers, and worse quality of drugs (Burhan, 2010).

To heal this chronic disease like TB MDR, the role of social support is very needed within the long time of clients' treatment, in order to reduce the risk of dropping out from the treatment (Syam et al., 2013). This situation indicates a condition when the clients of TB dropped out from the treatment process in around two months or more in continuous (Kemenkes, 2014). Dropping out from the treatment can be impacted from lack of knowledge, social support, role of medicine supervisor, and side effects from the treatment (Hendiani et al., 2014). Through the involvement from the family and close relatives or friends during the clients' treatment, it is hopefully that the clients' obedience to the treatment process becomes greater.

Based on the research findings, it is known that the social support is less influential to the success of treatment on the clients of TB MDR. It is identified that the clients in status of recovery get fewer

social support than the clients who dropped out from the treatment. The treatment failure on clients is caused by their own decision to choose dropping out from the treatment process due to several excuses like the clients might feel no any changes from the treatment and effect from the treatment which causes their selves to get burnt in skin, visual impairment, headache, and nausea. Although, the social support can improve the clients' health, but also needs to clients' will and self motivation to recover from the disease (Muna & Soleha, 2014).

The involvement of social support is not restricted to the treatment, for example supervision of drug consumption on the clients, but also attention in form of moral support, so the clients will have intention and spirit to recover again. Besides, it requires to diet and food supervision on the clients. The foods which contain protein, iron, vitamin A which can increase immunity response on the clients to influence process of clients' recovery. The treatment will not run effectively if it is not balanced with nutrition fulfillment to support recovery (Arifah et al., 2016).

Conclusion

The most common form of social support that is given to the clients of TB MDR is instrumental support through medical drugs supervision on the clients. The high social support on the clients of TB MDR is less influential and effective to the success of treatment, since it might also be influenced less motivation to the process of treatment. Lastly, the researcher suggests to the researchers to be able to conduct research which is related to self motivation on the clients of TB MDR to finish the treatment.

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