# ANALYSIS OF DRUG COMPLIANCE IN PULMONARY TB PATIENTS REVIEWING FROM ATTITUDE, MOTIVATION AND FAMILY SUPPORT

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## ABSTRAK

Pulmonary TB disease or known as TB is actually a curable disease, but many patients stop treatment prematurely. The purpose of this study is to analyzethe influence of attitude, motivation and family support on medication adherence in pulmonary TB patients in the work area of the Benjeng Health Center, Gresik Regency. The design of this research is an observational quantitative research with a cross sectional approach with the focus of the research being directed at analyzingthe influence of attitude, motivation and family support on medication adherence in pulmonary TB patients in the work area of the Benjeng Health Center, Gresik Regency. The total population of 143 respondents and a sample of 105 respondents were taken using the Simple Random Sampling technique. The findings showed that almost half of the respondents have a moderate attitude category as many as 46 respondents (43.81%). Almost half of the respondents have a moderate category of motivation as many as 45 respondents (42.86%). Almost half of the respondentshave adequate family support category as many as 48 respondents (45.71%). Most respondents 60 respondents (57.1%). Based on the results of Multiple Linear Regression analysis shows that with a p-value of 0.000 <0.05 then H1 is accepted so it can be concluded that simultaneously there isinfluenceattitude, motivation and family supporttomedication adherence in pulmonary TB patients in the work area of the Benjeng Public Health Center, Gresik Regency with an effect of 82.7%.

Kata kunci: attitude; family support; motivation; obedience

## INTRODUCTION

Pulmonary TB disease or known as TB is actually a curable disease, but many patients stop treatment prematurely. Pulmonary TB sufferers misunderstand healing, patients think the disease has healed because the symptoms of the disease have disappeared or are reduced. Pulmonary TB therapy needs to be carried out for at least six months (Sugito, 2013). By taking medication for 6-8 months regularly, it can be ensured that patients with pulmonary TB recover, so that patients do not lose work time and do not lose their productivity (Depkes, 2016). Tuberculosis (TB) is an infectious disease caused by Mycobacterium tuberculosis which is characterized by the formation of granulomas and causing tissue necrosis (Gary, 2014). TB infection can affect various tissues but the lung tissue is most commonly affected. Pulmonary TB accounts for 80% of the total incidence of TB disease, while the remaining 20% is extrapulmonary TB. Pulmonary TB has been known almost all over the world, as a chronic disease that can seriously reduce the physical endurance of the sufferer (Djojodibroto, 2015).

The WHO report in 2020 states that in 2013, out of 9,369,038 TB cases worldwide, the most TB sufferers were in Southeast Asia, namely 34%, 30% from Africa, 21% from the Western Pacific, 7% from the Middle East, 5% from the Middle East. from Europe, and 3% from America. Southeast Asia carries more than a third of the global TB burden with 3.2 million new TB patients per year (WHO, 2020). Pulmonary TB is the main killer of people living with HIV, causing 1/4 of all deaths. Pulmonary TB has a global impact, around 80% of reported TB cases occur in 22 countries in the world. Based on the report of survey results conducted by WHO

from 2008 to 2012 in countries in the world, that the use of Directly Observed Treatment Short Course (DOTS) and stop TB strategies can reduce TB burden every year. The use of DOTS and the stop TB strategy is a treatment with direct supervision of therapy by helping patients take drugs regularly to ensure patient compliance in pulmonary TB treatment.

Data from the Ministry of Health of the Republic of Indonesia in 2020 there were 197,000 new cases of positive smear pulmonary TB, namely 117,000 men and 80,000 women. The prevalence of Tuberculosis per 100,000 population of East Java Province in 2017 was 106.42. The highest prevalence of tuberculosis was in Ngawi Regency, which was 358.91 per 100,000 population and the lowest was in Surabaya Regency, namely 44.04 per 100,000 population. Especially in Gresik Regency, the number of new cases of positive smear pulmonary TB found 1,101 people out of 1,181,678 people so that Gresik Regency was ranked the tenth highest East Java Province (East Java Provincial Health Office, 2020).

More specifically, in one of the Puskesmas in Gresik Regency, namely the Benjeng Health Center, the number of pulmonary TB cases in 2020 was 97 patients. This number increased from the previous year which only amounted to 74 patients. Currently, there are 97 TB patients in Benjeng Health Center in three categories, in Category 1 there are 82 patients, Category 2 TB has 12 patients, while MDR TB has 3 patients. Sufferer There are 34 patients who routinely consume drugs and 63 patients who do not routinely, so it is very important for pulmonary TB patients to get motivation and support from their families so that the disease can be cured until it is completely cured. Treatment that regularly in TB patients can recover completely, if the patient comply with the rules of TB treatment. What is important for people with TB i.e. not dropping out of medication because if patient discontinues treatment TB germs will start to multiply again so the patient must repeat intensive treatment for first 2 months.

Tuberculosis is an acute or chronic infection caused by Mycobacterium tuberculosis. People who live in densely populated and poorly ventilated conditions are more likely to become infected. The source of transmission is tuberculosis sufferers when coughing or sneezing, patients spread germs through the air in the form of phlegm splashes or droplet nuclei (Lippincott, 2011). Pulmonary TB is a disease that can be treated and cured. Pulmonary TB treatment can be given in 2 stages, namely the intensive stage for 2 months of treatment and the follow-up stage for the next 4-6 months. Regular treatment of pulmonary TB patients can be completely cured, if the patient himself is willing to comply with the rules regarding pulmonary TB treatment. It is very important for the patient not to drop out of treatment and if the patient stops treatment, the pulmonary TB germs will start to multiply again, which means the patient repeats intensive treatment for the first 2 months (WHO, 2013).

The main social support comes from family support, because family support plays an important role in the lives of tuberculosis sufferers who struggle to recover, think ahead, and make their lives more meaningful (Melisa, 2012). Family support is an important factor for a person when facing problems (health) and as a preventive strategy to reduce stress where the outlook on life is broad and not easily stressed. There is strong support between the family and the health status of its members where the family is very important for every aspect of care, health care for family members to achieve a healthy state to the optimum level (Ratna, 2010). Motivation is an impulse from within a person that causes the person to carry out certain activities in order to achieve a goal. Meanwhile, Robbin (2013) states that motivation is the ability to struggle to a higher level in order to achieve goals. Handoko (2015) provides an explanation of motivation as an activity that causes, distributes and maintains human behavior. Many terms are used to describe motivation, including need, urge, wish, and drive. In this case, the term motivation is

used, which is defined as a condition in a person's personality that encourages the individual's desire to carry out certain activities in order to achieve goals.

Stigma against pulmonary TB patients is influenced by the length of time suffering from pulmonary TB disease, this is because the healing process for pulmonary TB takes a long time, which is about 6 months by consuming drugs regularly, if the patient is not regular in consuming drugs, the patient repeats the initial stage (Ferry, 2007). 2014). Pulmonary TB can be cured if: take regular treatment for 6-8 months. Because treatment takes a long time, so patients with pulmonary TB are very allows for stress which is heavy enough that apart from medical treatment required also need motivation, support social status from family and people in surroundings and environmental stigma (WHO, 2017).To ensure the regularity of treatment, a PMO (drug taking supervisor) is needed. Preferably the PMO is a health worker, for example a village midwife, nurse, worker, sanitarian, immunization interpreter and others. If there is no possible health worker, PMO can come from health cadres, teachers, PPTI members, PKK or other community leaders or family members.

The duty of a PMO is to supervise TB patients to take medication regularly until completion of treatment. Provide encouragement to patients to want regular treatment. Remind the patient to recheck the sputum at the appointed time. Provide counseling to family members of TB patients who have suspicious symptoms of TB to immediately check themselves to the Health Service Unit. The PMO's job is not to replace the patient's obligation to take medication from the service unit. The important information that PMO needs to understand is to convey to patients and their families that TB is caused by germs, not hereditary diseases or curses. TB can be cured with regular treatment. The mode of transmission of TB, suspicious symptoms and methods of prevention, and the way in which patient treatment is given (intensive and advanced stages). The importance of supervision so that patients seek regular treatment. The possibility of drug side effects and the need to immediately seek help from the Health Service Unit (UPK) (Bumbunan, 2013). The authors are interested in researching the analysis of medication adherence in pulmonary TB patients in terms of attitudes, motivation and family support in the work area of the Benjeng Health Center, Gresik Regency.

**METODE**
In this study, the researcher used an observational quantitative design with a cross sectional approach, which is a study to study the dynamics of the correlation between risk factors and effects, by approaching, observing or collecting data at once (point time approach), meaning that each subject The study was observed only once and measurements were made on the status of the character or variable of the subject at the time of examination. This does not mean that all research subjects are observed at the same time (Soekidjo, 2012). This research will analyze the influence of attitude, motivation and family support on medication adherence in pulmonary TB patients in the work area of the Benjeng Health Center, Gresik Regency. The total population of 143 respondents and a sample of 105 respondents were taken using the Simple Random Sampling technique. Variable dependent Attitude, Motivation and Family Support, independent variables Obedience

Table 1.
Operational Definition Of Variabel

| Variable | Parameters |
|---|---|
| Variable Independent:<br>1. Attitude | 1. Receiving (Receiving)<br>2. Responding (Responding)<br>3. Appreciate (Valuing)<br>4. Responsibility (Responsible) |
| 2. Motivation | 1. Motivation to heal<br>2. Motivation to take medicine<br>3. Motivation not to transmit the disease to others |
| 3. Family support | 1. Informational support<br>2. Rating support<br>3. Instrumental support<br>4. Emotional support |
| Variable Dependents:<br>Obedience | 1. Taking medicine<br>2. Take the medicine given<br>Take medication on schedule |

The instrument used is a questionnaire sheet to analyze the influence of attitude, motivation and family support on medication adherence in pulmonary TB patients in the work area of the Benjeng Health Center, Gresik Regency. Data analysis using Linear Regretion test. The ethical test has been carried out and the results have passed the ethical clearance test at the IIK Strada Indonesia ethics commission.

**HASIL**

Table 1. Frequency distribution of respondents based onrespondent's attitudeat (n=105)

| Criteria | f | % |
|---|---|---|
| Well | 32 | 30.48 |
| Enough | 46 | 43.81 |
| Not enough | 27 | 25.71 |

Table 1, it is known that almost half of the respondents have a moderate category attitude as many as 46 respondents (43.81%).

Table 2.
Frequency distribution of respondents based onrespondent's motivationat (n=105)

| Criteria | f | % |
|---|---|---|
| Tall | 36 | 34.29 |
| Currently | 45 | 42.86 |
| Low | 24 | 22.86 |

Table 2, it is known that almost half of the respondents have moderate category motivation as many as 45 respondents (42.86%).

Table 3, it is known that almost half of the respondentshave adequate family support category as many as 48 respondents (45.71%).

Table 3.
Frequency distribution of respondents based onrespondent's family supportat (n=105)

| Criteria | f | % |
|---|---|---|
| Well | 30 | 28.57 |
| Enough | 48 | 45.71 |
| Not enough | 27 | 25.71 |

Table 4.
Frequency distribution of respondents based onrespondent complianceat (n=105)

| Criteria | f | % |
|---|---|---|
| Obey | 45 | 42.9 |
| Not obey | 60 | 57.1 |

Table 4, it is known that most of the respondents 60 respondents (57.1%).

Table 5.
Statistical Test Results

| Independent Variables | B | CI 95% | | Sig |
|---|---|---|---|---|
| | | Lower Limit | Upper Limit | |
| Attitude | 0.489 | 5,48 | 9,48 | 0.001 |
| Motivation | 0.524 | 3,35 | 6,11 | 0.004 |
| Family support | 0.381 | 8.75 | 15.24 | 0.000 |
| Adj R-Squared | | 0.827 | | |
| p-value | | 0.000 | | |

**Partial**
a. Influence of Attitude on Compliance
   Based on the results of Linear Regression analysis shows that the p-value is 0.001 <0.05 then H1 is accepted so it is concluded that partially there isattitude influencetodrug adherence in pulmonary TB patients in the work area of the Benjeng Health Center, Gresik Regency.
b. The Effect of Motivation on Compliance
   Based on the results of Linear Regression analysis shows that the p-value is 0.004 <0.05, then H0 is rejected and H1 is accepted, so it can be concluded that partially there isinfluence motivation towardsdrug adherence in pulmonary TB patients in the work area of the Benjeng Health Center, Gresik Regency.
c. The Effect of Family Support on Compliance
   Based on the results of Linear Regression analysis shows that the p-value 0.000 <0.05 then H0 is rejected and H1 is accepted so it is concluded that partially there isthe effect of family support ondrug adherence in pulmonary TB patients in the work area of the Benjeng Health Center, Gresik Regency.

**Simultaneous**
Based on the results of Multiple Linear Regression analysis shows that with a p-value of 0.000 <0.05 then H1 is accepted so it can be concluded that simultaneously there isinfluenceattitude, motivation and family supporttomedication adherence in pulmonary TB patients in the work area of the Benjeng Public Health Center, Gresik Regency with an effect of 82.7%.

## DISCUSSION

### Attitudes of Pulmonary TB Patients

The results showed that almost half of the respondents had a moderate category attitude as many as 46 respondents (43.81%). In addition, a number of 32 respondents (30.48%) had a good attitude category. Meanwhile, a number of 27 respondents (25.71%) had an attitude of less category. An individual is very closely related to their respective attitudes as their personal characteristics. Attitude in general is often interpreted as an action taken by an individual to respond to something. The notion of attitude is explained by Saifudin Azwar (2010) attitude is defined as a reaction or response that arises from an individual to an object which then raises individual behavior towards the object in certain ways.

Gerungan (2014) also describes the notion of attitude or attitude as a reaction to the views or feelings of an individual towards a particular object. Although the object is the same, but not all individuals have the same attitude, it can be influenced by individual circumstances, experiences, information and the needs of each individual is different. A person's attitude towards the object will shape the individual's behavior towards the object. Human attitudes are not formed since humans are born. Human attitudes are formed through social processes that occur during their lives, where individuals get information and experience. This process can take place within the family, school or community. When there is a social process there is a reciprocal relationship between the individual and his surroundings. The existence of these interactions and relationships then forms a pattern of individual attitudes with their surroundings. Saifudin Azwar (2010) describes the attitude-forming factors, namely: strong experience, the influence of other people who are considered important, the influence of culture, mass media, educational institutions and religious institutions, the influence of emotional factors.

Attitude is the response of someone who is still closed to a stimulus or object. The manifestation of that attitude cannot be directly seen, but can only be interpreted beforehand from closed behavior. Attitudes will be more easily formed if the personal experience occurs in situations that involve emotional factors. Based on the results of the study, it was found that most of the respondents had a sufficient category attitude but there were still many respondents who had a less category attitude.

### Motivation for Pulmonary TB Patients

The results showed that almost half of the respondents had moderate category motivation as many as 45 respondents (42.86%). In addition, 36 respondents (34.29%) have a high category of motivation. While a number of 24 respondents (22.86%) have low motivation category. Motivation is what causes and supports a person. According to Mashlow (2014) individuals will be motivated to fulfill what needs are strongest in themselves at a certain time. Terry GR, provides a definition of motivation is the desire contained in an individual who stimulates him to take actions. According to Ishak (2013) motivation is something that is the main thing, which encourages someone to work.

Motivation is a psychological drive that directs a person towards a goal. The word motivation comes from the Latin word movere, which means to move. But motivation involves more than just physical movement. Motivation involves physical and mental movement. Motivation also has two sides: the movement can be seen, but the motive must be inferred (Simamora, 2014). Motivation is an impulse from within a person that causes the person to carry out certain activities in order to achieve a goal. While Robbin (2017) mentions that motivation is the ability to fight to a higher level in order to achieve goals. Handoko (2008) provides an explanation of

motivation as an activity that causes, distributes and maintains human behavior. Many terms are used to describe motivation, including need, urge, wish, and drive. In this case, the term motivation is used, which is defined as a condition in a person's personality that encourages the individual's desire to carry out certain activities in order to achieve goals.

Sehow it was mentioned above that behavior is driven by needs (needs) that exist in individuals and directed at goals (goals) that can satisfy their needs. Meanwhile, according to Chaplin (2012) states that recovery is the return of a person to a normal condition after suffering from an illness, mental illness, or injury. So it can be said that the motivation to recover is behavior that is driven by the needs that exist in individuals and is directed at the goals (goals) where a person returns to a normal condition after suffering from an illness, mental illness, or injury. Motivation to heal is a factor that encourages people to act in a certain way in order to obtain healing. Thus it can be said that the motivation to recover is basically a mental condition that encourages an action (action or activities) and provides strength (energy) that leads to the achievement of healing. This motivation to recover can also be obtained through several stimuli, stimulation of things like the above that will foster motivation, and motivation that has grown can indeed become the motor and encouragement to achieve healing (Dedewijaya, 2014).

According to researchers, motivation is a determination to do something, so that if the person has high motivation, the person will try hard to do something. However, it is different if someone has low motivation, where that person will tend to just follow the flow and not try to do things on a regular basis. Based on the results of the study, it was found that there were still many pulmonary TB patients who had low motivation to recover. This is due to many things, one of which is that the pulmonary TB patient does not understand the importance of taking medication regularly and sometimes neglects to take medication when he or she is busy. So that pulmonary TB sufferers do not want to try to take the time to take medicine when they are busy.

**Family Support for Pulmonary TB Patients**
The results showed that almost half of the respondents had sufficient family support as many as 48 respondents (45.71%). In addition, a number of 30 respondents (28.57%) had family support in the good category. While a number of 27 respondents (25.71%) had family support in the category of less. According to Friedman (2014) family support is the attitude, action and acceptance of the family towards its members. Family members are seen as an inseparable part of the family environment. The family also functions as a support system for its members and family members view that people who are supportive are always ready to provide help with assistance if needed.

Kane in Friedman (2012) defines family support as a process of the relationship between the family and the social environment. According to Kuncoro (2012) family support is verbal and non-verbal communication, advice, real help or behavior provided by people who are familiar with the subject in their social environment or in the form of presence and things that can provide emotional benefits or influence on the behavior of the recipient, in this case the person who feels emotionally supported feels relieved because he is noticed, gets advice or a pleasant impression on him. Family and community support has a big role in improving medication adherence, namely by monitoring and providing encouragement to sufferers. The advantage of the family as PMO is that they live in the same house as the sufferer so that the monitoring is more optimal and there is no need for direct transportation costs (Becher, 2014). Patients and their families are aware of the importance of adherence to treatment and often sufferers want to immediately complete treatment so that the community sees themselves as recovering so that they can be accepted back into the community.

Kaplan (2013) explains that families have four types of support, namely: informational support, assessment, instrumental and emotional support. Patients with MDR TB really need the four types of support that come from the family so that they can improve medication adherence and speed up the healing process. According to Rahayu, Ferani & Rahayu (2010) the factors that influence family support are internal factors and external factors. Internal factors include the stage of development, education and level of knowledge, emotion and spirituality. External factors include support practices in the family, psychosocial economy and family background.

The stage of development affects family support, meaning that support can be determined by the age factor, in this case growth and development, thus each age range (infant-elderly) has a different understanding and response to health changes. Children have a higher level of compliance than adolescents even though children have less information. For elderly patients, adherence to medication can be affected by reduced memory, plus if elderly patients live alone. According to Dunbar (2014) adherence to medication rules in children, adolescents and adults is the same. Education and knowledge level, a person's belief in the existence of support is formed by intellectual variables consisting of knowledge, educational background and past experience. Cognitive abilities will shape a person's way of thinking, including the ability to understand the factors associated with disease and use knowledge about health to maintain their health (Asmet, 2014).

Emotional factors also affect the belief in the existence of support and how to implement it. A person who experiences a stress response in every change in his life tends to respond to various signs of illness, perhaps by worrying that the disease is threatening his life. A person who generally appears to be very calm may have little emotional response during an illness. An individual who is unable to cope emotionally with the threat of disease may deny that he has symptoms of the disease and does not want to undergo treatment (Handoko, 2011). In TB patients, family support is considered an important determinant of health behavior. Family support that a person needs can be in the form of moral, emotional and intimate support as well as the need for information and feedback. This can be catered for by the family. The strength of family support influences individual self-care behavior through increasing motivation, providing information and providing feedback (Xiaolian, 2012).

According to researchers, the family has an important role in a person's life as well as with pulmonary TB patients. With family support, pulmonary TB sufferers will feel more meaningful and have the spirit to be able to recover from their illness. Based on the results of the study, it was found that there were still many pulmonary TB patients who did not get family support. Families should be able to provide encouragement, input and remind to take medicine that the purpose of taking medicine is for the patient's recovery and so as not to infect others. The cause of the lack of family support is because the family is too busy with their work to meet the family's needs. In addition, because the family is tired of reminding people with pulmonary TB to take medicine because in the past, their advice was often ignored.

**Compliance with taking medication in patients with pulmonary TB**
The results showed that most of the respondents did not comply with taking hypertension drugs as many as 60 respondents (57.1%). Meanwhile, 45 respondents (42.9%) were obedient to taking hypertension medication. Adherence to TB treatment is a major factor in successful TB treatment, reduces the risk of developing MDR TB and is the main reason for developing the DOTS Strategy. Compliance is the extent to which a person's behavior in taking medication, following a diet and/or implementing lifestyle changes, follows agreed health care

recommendations (WHO, 2015). DOT is a key element of the policy package for TB control and requires direct observers of patients ingesting drugs. PMOs can be health workers or trained and supervised members of the community. The best adherence indicators included smear conversion results from positive to negative, improvement in symptoms, improvement in general condition. In general, patients must adhere to medication to achieve treatment success, namely increasing the chance of recovery, reducing the risk of recurrence and minimizing drug resistance (Maartens & Wilkinson, 2017).

WHO (2015) defines compliance as the extent to which patients follow medical instructions. However, an effective TB regimen also requires patients to follow health behaviors. Most of the research results show adherence to treatment, (Trajman, 2010) but in health behavior it is not only adherence to medication that is needed. Specifically for patients with pulmonary TB, Biswas (2010) proposed six health behavior adherence, namely adherence to taking OAT, following a healthy diet, doing physical exercise, maintaining environmental cleanliness, preventing disease transmission and avoiding risk factors for relapse. The four main interacting factors to influence adherence to TB treatment are structural factors including poverty and gender discrimination, social context, health care factors and personal factors. Adherence to the long course of TB treatment is a complex, dynamic phenomenon with multiple factors impacting treatment behavior. Patient adherence to treatment regimens is influenced by a number of these factors (Volmick, 2010).

According to researchers, adherence to medication in TB patients can affect the recovery of pulmonary TB patients. If you are obedient to taking medication, it is very likely to recover from the disease, and vice versa if you are not obedient to taking medication, it is also likely that people with pulmonary TB will not recover from their illness and there is even a possibility that the pulmonary TB virus will be resistant to pulmonary TB drugs and make it difficult to cure TB patients. Lungs. Based on the results of the study, it was found that most of the patients with pulmonary TB did not comply with taking medication. This can be caused by low motivation to recover and lack of support from family. In addition, it can also be caused by the desire to heal too little. TB sufferers have resigned themselves to their illness and sometimes ignore the medication schedule that has been set by the doctor.

**Influence Attitudes towards adherence to medication in patients with pulmonary TB**
Based on the results of Linear Regression analysis shows that the p-value is 0.001 <0.05 then H1 is accepted so it is concluded that partially there isattitude influencetodrug adherence in pulmonary TB patients in the work area of the Benjeng Health Center, Gresik Regency. Tuberculosis is an acute or chronic infection caused by Mycobacterium tuberculosis. People who live in densely populated and poorly ventilated conditions are more likely to become infected. The source of transmission is tuberculosis sufferers when coughing or sneezing, patients spread germs through the air in the form of phlegm splashes or droplet nuclei (Lippincott, 2011).

Pulmonary TB is a disease that can be treated and cured. Pulmonary TB treatment can be given in 2 stages, namely the intensive stage for 2 months of treatment and the follow-up stage for the next 4-6 months. Regular treatment of pulmonary TB patients can be completely cured, if the patient himself is willing to comply with the rules regarding pulmonary TB treatment. It is very important for the patient not to drop out of treatment and if the patient stops treatment, the pulmonary TB germs will start to multiply again, which means the patient repeats intensive treatment for the first 2 months (WHO, 2013). Stigma against pulmonary TB patients is influenced by the length of time suffering from pulmonary TB disease, this is because the

healing process for pulmonary TB takes a long time, which is about 6 months by consuming drugs regularly, if the patient is not regular in consuming drugs, the patient repeats the initial stage (Ferry, 2007). 2014).

Pulmonary TB can be cured if: take regular treatment for 6-8 months. Because treatment takes a long time, so patients with pulmonary TB are very allows for stress which is heavy enough that apart from medical treatment required also need motivation, support social status from family and people in surroundings and environmental stigma (WHO, 2017).To ensure the regularity of treatment, a PMO (drug taking supervisor) is needed. Preferably the PMO is a health worker, for example a village midwife, nurse, worker, sanitarian, immunization interpreter and others. If there is no possible health worker, PMO can come from health cadres, teachers, PPTI members, PKK or other community leaders or family members.

The duty of a PMO is to supervise TB patients to take medication regularly until completion of treatment. Provide encouragement to patients to want regular treatment. Remind the patient to recheck the sputum at the appointed time. Provide counseling to family members of TB patients who have suspicious symptoms of TB to immediately check themselves to the Health Service Unit. The PMO's job is not to replace the patient's obligation to take medication from the service unit. The important information that PMO needs to understand is to convey to patients and their families that TB is caused by germs, not hereditary diseases or curses. TB can be cured with regular treatment. The mode of transmission of TB, suspicious symptoms and methods of prevention, and the way in which patient treatment is given (intensive and advanced stages). The importance of supervision so that patients seek regular treatment. The possibility of drug side effects and the need to immediately seek help from the Health Service Unit (UPK) (Bumbunan, 2013).

According to researchers, pulmonary TB disease or known as TB is actually a curable disease, but many patients stop treatment prematurely. Pulmonary TB sufferers misunderstand healing, patients think the disease has healed because the symptoms of the disease have disappeared or are reduced. Pulmonary TB therapy needs to be carried out for at least six months, by taking medication for 6-8 months regularly, it can be ensured that patients with pulmonary TB recover, so that patients do not lose work time and do not lose their productivity.

**Influence Motivation for Compliance with Taking Drugs in Patients with Pulmonary TB**
Based on the results of Linear Regression analysis shows that the p-value is 0.004 <0.05, then H0 is rejected and H1 is accepted, so it can be concluded that partially there isinfluence motivation towardsdrug adherence in pulmonary TB patients in the work area of the Benjeng Health Center, Gresik Regency. Tuberculosis (TB) is an infectious disease caused by Mycobacterium tuberculosis which is characterized by the formation of granulomas and causing tissue necrosis (Gary, 2014). TB infection can affect various tissues but the lung tissue is most commonly affected. Pulmonary TB accounts for 80% of the total incidence of TB disease, while the remaining 20% is extrapulmonary TB. Pulmonary TB has been known almost all over the world, as a chronic disease that can seriously reduce the physical endurance of the sufferer (Djojodibroto, 2015).

Motivation is an impulse from within a person that causes the person to carry out certain activities in order to achieve a goal. Meanwhile, Robbin (2013) states that motivation is the ability to struggle to a higher level in order to achieve goals. Handoko (2015) provides an explanation of motivation as an activity that causes, distributes and maintains human behavior. Many terms are used to describe motivation, including need, urge, wish, and drive. In this case, the term motivation is used, which is defined as a condition in a person's personality that encourages the individual's desire to carry out certain activities in order to achieve goals.

Behavior that is driven by needs (needs) that exist in individuals and is directed at goals (goals) that can satisfy their needs. Meanwhile, according to Chaplin (2012) states that recovery is the return of a person to a normal condition after suffering from an illness, mental illness, or injury. So it can be said that the motivation to recover is behavior that is driven by the needs that exist in individuals and is directed at the goals (goals) where a person returns to a normal condition after suffering from an illness, mental illness, or injury.

Motivation to heal is a factor that encourages people to act in a certain way in order to obtain healing. Thus it can be said that the motivation to recover is basically a mental condition that encourages an action (action or activities) and provides strength (energy) that leads to the achievement of healing. This motivation to recover can also be obtained through several stimuli, stimulation of things like the above that will foster motivation, and motivation that has grown can indeed become the motor and encouragement to achieve healing (Dedewijaya, 2014). According to researchers with high motivation, someone will have high compliance as well. On the other hand, if people with pulmonary TB have low motivation, they will tend not to comply. Based on the results of the study, it was found thatthere isinfluencethe effect of motivation on compliance taking medicine for pulmonary TB patientsWorking Area of Benjeng Health Center, Gresik Regencywhich means that patients with pulmonary TB in order to comply with therapy must have high motivation. Motivation can be formed by providing education and direction about pulmonary TB to patients and the impact of not taking drugs.

**Influence Family Support for Compliance with Medication for Pulmonary TB Patients**
Based on the results of Linear Regression analysis shows that the p-value 0.000 <0.05 then H0 is rejected and H1 is accepted so it is concluded that partially there isthe effect of family support ondrug adherence in pulmonary TB patients in the work area of the Benjeng Health Center, Gresik Regency. Tuberculosis is an acute or chronic infection caused by Mycobacterium tuberculosis. People who live in densely populated and poorly ventilated conditions are more likely to become infected. The source of transmission is tuberculosis sufferers when coughing or sneezing, patients spread germs through the air in the form of phlegm splashes or droplet nuclei (Lippincott, 2011).

Pulmonary TB is a disease that can be treated and cured. Pulmonary TB treatment can be given in 2 stages, namely the intensive stage for 2 months of treatment and the follow-up stage for the next 4-6 months. Regular treatment of pulmonary TB patients can be completely cured, if the patient himself is willing to comply with the rules regarding pulmonary TB treatment. It is very important for the patient not to drop out of treatment and if the patient stops treatment, the pulmonary TB germs will start to multiply again, which means the patient repeats intensive treatment for the first 2 months (WHO, 2013). The main social support comes from family support, because family support plays an important role in the lives of tuberculosis sufferers who struggle to recover, think ahead, and make their lives more meaningful (Melisa, 2012). Family support is an important factor for a person when facing problems (health) and as a preventive strategy to reduce stress where the outlook on life is broad and not easily stressed. There is strong support between the family and the health status of its members where the family is very important for every aspect of care, health care for family members to achieve a healthy state to the optimum level (Ratna, 2010).

Stigma against pulmonary TB patients is influenced by the length of time suffering from pulmonary TB disease, this is because the healing process for pulmonary TB takes a long time, which is about 6 months by consuming drugs regularly, if the patient is not regular in consuming drugs, the patient repeats the initial stage (Ferry, 2007). 2014). Pulmonary TB can be cured if:

take regular treatment for 6-8 months. Because treatment takes a long time, so patients with pulmonary TB are very allows for stress which is heavy enough that apart from medical treatment required also need motivation, support social status from family and people in surroundings and environmental stigma (WHO, 2017).To ensure the regularity of treatment, a PMO (drug taking supervisor) is needed. Preferably the PMO is a health worker, for example a village midwife, nurse, worker, sanitarian, immunization interpreter and others. If there is no possible health worker, PMO can come from health cadres, teachers, PPTI members, PKK or other community leaders or family members.

The duty of a PMO is to supervise TB patients to take medication regularly until completion of treatment. Provide encouragement to patients to want regular treatment. Remind the patient to recheck the sputum at the appointed time. Provide counseling to family members of TB patients who have suspicious symptoms of TB to immediately check themselves to the Health Service Unit. The PMO's job is not to replace the patient's obligation to take medication from the service unit. The important information that PMO needs to understand is to convey to patients and their families that TB is caused by germs, not hereditary diseases or curses. TB can be cured with regular treatment. The mode of transmission of TB, suspicious symptoms and methods of prevention, and the way in which patient treatment is given (intensive and advanced stages). The importance of supervision so that patients seek regular treatment. The possibility of drug side effects and the need to immediately seek help from the Health Service Unit (UPK) (Bumbunan, 2013).

According to researchers by having good family support, someone will have good compliance as well. On the other hand, if people with pulmonary TB have less family support, they will tend not to comply. Based on the results of the study, it was found thatthere isinfluencethe effect of family support on compliance taking medicine for pulmonary TB patientsWorking Area of Benjeng Health Center, Gresik Regencywhich means that the family is very important in assisting the recovery of pulmonary TB patients. Families must monitor and provide appropriate direction to patients with pulmonary TB so that they have the spirit to recover. And also explained that people with pulmonary TB will not be ostracized from their family or environment as long as they regularly take medicine so that the virus in the body immediately dies and does not spread everywhere by always wearing a mask.

**CONCLUSION**
Almost half of the respondents have a moderate attitude category as many as 46 respondents (43.81%) and   motivation as many as 45 respondents (42.86%). Almost half of the respondentshave adequate family support category as many as 48 respondents (45.71%). There isattitude influencetodrug adherence in pulmonary TB patients in the work area of the Benjeng Health Center, Gresik Regency. There isinfluence motivation towardsdrug adherence in pulmonary TB patients in the work area of the

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