

The Influence of Patient's Knowledge about Tuberculosis Disease and Tuberculosis Drug's Side Effect Toward Patient's Adherence at Siti Khodijah Hospital Sepanjang – Sidoarjo.

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Background

- Pulmonary Tuberculosis (TB) disease remains a health problem in Indonesia and many other developing countries.
- One of the problems is the patient's adherence to finish their medication.
- Other factor influence adherence of patient is side effect of tuberculosis drug (OAT), Other research show 40 % patient that consume OAT felt the side effect of drugs (Hussar,2000)

- Many kind of side effect are disguised, limp and vomit.
- The died patient because tuberculosis found at 15 - 64 years old.
- Risk factors to failure therapy because of less of patient's knowledge about TB desease, for examples about cause of illness, how bacteri infected to human , the symptom of tuberculosis and the way to terapy .
- The primer Tuberculosis drugs are Pirazinamid, INH, Rifampisin and Etambutol.

Objective

- This study was done to see the influence of patient's knowledge about TB disease and side effects of oral tuberculosis drugs toward patient's adherence.

Method

- Population in this research is out patient with pulmonary tuberculosis diagnosis in Siti Khadijah Hospital Sidoarjo city.
- Sample is all pulmonary tuberculosis patient which complete inclusion criteria, there are out patient diagnosis pulmonary tuberculosis which get oral primer tuberculosis drugs for two month, the patient was 15– 64 years old and they was not consume other drugs.

- A cross sectional study was performed from May until June 2007
- The questioners focused on patient's knowledge about the disease and side effects of the drugs were given to 24 samples.
- By using linear regression with dummy variable can be seen the factor influencing patient's adherence.

Result

Common Image of Respondent

- The result showed age of respondent are 23 – 55 years old (83%) , it's indicate that activity in this age uncondusive place toward easy to get tuberculosis diseases.
- The sex are men (75%) and woman (25%). this condition show that men's ability make easier to infected tuberculosis.

- Based on education level 38% respondent was level education in high school and just 4% was level education in scholar. This result same with Hudoyo research (2004) show that education level influence toward adherence of therapy.

Character Based on Knowledge Respondent About Tuberculosis Disease

- Result data showed kind of knowledge about tuberculosis disease are :
 - a) 83% respondent know disease symptom of tuberculosis is cough with mucus
 - b) 62% respondent know way spread of tuberculosis by droplet
 - c) 87% respondent know that tuberculosis was long term therapy
 - d) 91 % respondent know that tuberculosis therapy must consume drug routinely

Character based on side effect Tuberculosis drugs

- This research show 12 % respondent get side effect of tuberculosis drug.
- The kind of side effect is : often forget something , dry lips , down weight of body, colour of palm of the hand and eyes ball is yellow, headache and difficult to concentration.
- 88% respondent was not get side effect. This cause respondent consume tuberculosis drugs constantly like doctors suggest

Character Based On Indicator Of Adherence in Therapy

- Result of research based on adherence indicator can explain :
 - 83% from all respondent consumed tuberculosis drugs with right regimen dose.
 - 79 % respondent used tuberculosis drug with right dose suit with regulatory in two month do therapy.
 - 95% respondent used drugs with right way, give distance in consume each drugs.

Result of Multiple Regression Analisis

Tabulation data analysed with regression linear test in SPSS program to know the significantly influence Independent variable simultaneous . Result of regression linear test showed in table1

Table 1. Regression linear test in SPSS program (Anova)

Model	Sum of Squares	df	Mean Squares	F	Sig.
Regresión	14.167	2	7.083	9.495	.001 ^a
Residual	15.667	21	.764		
Total	29.883	23			

a. Predictors (constant) Independent variable : Knowledge, Side effect

b. Dependent Variable Adherence

Table.1 show that value of significancy in anova test is $0.001 < 0.05$. It's sign that knowledge variable and side effect variable simultaneous influence to adherence variable.

- On value of R square can resume that influence value of both the variable was 47.5% toward adherence variable, and the rest 52.5% influence from other variable. (Table 2)

Table 2 . Model Summary

Model	R	R.Square	Adjusted R.Square	Std. error of the estimate
1	.689	.475	.425	.86373

Predictors (constant), Knowledge, Side effect

Table 3. Coefficients Correlation Variable

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std.error	Beta		
(constant)	2.333	.453	.546	5.156	.000
Knowledge	1.500	.480	.247	3.125	.005
Side effects	-.833	.589		-1.414	.172

- Significant value of knowledge variable partially was $0.005 < 0.05$, so there have significance influence toward adherence TB therapy
- Side effect variable partially have not significance influence ($0.172 > 0.05$) toward adherence TB therapy.
- Model that used to examine is : $Y = a + b_1X_1 + b_2X_2 + \dots + b_nX_n$
- The regression linear was $Y = 2.333 + 1.500 X_1 - 0.8333X_2$.

Conclusion

- Factor of patient knowledge about tuberculosis partially have influence significant (significance value=0,005) toward adherence of tuberculosis patient in Siti Khadijah Hospital Sidoarjo.
- Factor side effect of tuberculosis drug partially haven't influence significant (significance value=0,172) toward adherence of tuberculosis patient in Siti Khadijah Hospital Sidoarjo
- Factor of patient knowledge and side effect tuberculose drugs simultaneus influence significant (significance value=0,001) toward adherence of tuberculosis patient in Siti Khadijah Hospital Sidoarjo.
- Result R square value (influence value the both variable toward dependent variable) was 47.5% and the rest (52.5%) influence from other variable.

THANK YOU