The Community Participation in the Case Detection of the Suspect Pulmonary Tuberculosis in the District of Tanah Datar, West Sumatera, Indonesia

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ABSTRACT

Pulmonary tuberculosis is the major infectious diseases that cause death in Indonesia. Indonesian government's efforts to cope with this disease are to follow the WHO recommendation to use the DOTs strategy. The weakness of this strategy is DOTs socialization has not reached all health centers, government and private hospitals so that the finding of new cases is still very low. Introduced an alternative model is the partnership of educational institutions, health services and communities, through community empowerment in the early detection of TB cases. This model was named "Corong Segitiga sehat Model." The purpose of this study was to see community participation in trials that proved the model of the household contact person coverage checked him into the clinic. Quantitative and qualitative research methods with experimental research design that uses one-group pre-post test. The results showed the formation of partnerships with the model PPTB group after 1 month of training provided by educational institutions and health centers, patients with detectable BTA (+) as many as 9 people, as many as 14 people with suspected tuberculosis. These data supported the statement that the results of the training cadre will strengthen our selves for the more daring cadres advised people to check their household contact him to health center. Involve partnerships with community participation is one key to effective implementation of the model to detect new cases of tuberculosis. It is recommended for local governments actively participate as one component of a healthy funnel triangle, because of the influence of local government to increase community larger.

Keywords: TB-community participation-Corong Segitiga Sehat Model- PPTB

INTRODUCTION

The infectious pulmonary tuberculosis is on the top level of the death cause the whole Indonesia. Indonesia is the greatest contributor number three in the world for this disease. In 1999, the WHO estimated that among 100.000 people, 130 were the new sufferers of the TB with the positive BTA (Department of Health, 2001). The policy made by the government in overcoming the TB disease was with the Directly Obserbed Treatment Short-Course (DOTs) strategy. This strategy was still less emphasized of its socialization in the program. The monitoring and evaluation were not runned in routine, particularly for Medicine Taking Observer (Pengawas Menelan Obat/PMO). This PMO in general were family members, however in reality, the family were less active in the health maintenance of the sufferers. The range of the TB sufferers with the DOTs strategy in 1995 to 1998 reached only 10%. The sufferers coverage, registration, and reporting were not uniformized yet in all health service unit both governmental and private (Rika Sabri, 2005).

The overcoming performance of the TB disease cannot run well when the involved groups have neither controlling and monitoring. This activity is to day not emphasized towards the PMO, that the PMO as the community part do not understand on the TB disease and the riskof caring failure. The observer of the medicine consumers are only emphasized or patterned of the observation of the TB sufferers when they consume them, that the community in general put the burdens to the PMO in order to observer the TB sufferers who consume the medicine. This does not show the community participation in the TB overcoming. One of the alternative to increase the community participation in the detection of the TB suspects in the community.

The research done in 2009 has been identified in the will of educational and health institutions to perform the collaboration with community to empower the community in overcoming the infection of th TB disease (Rika etc, 2009). Beside, the research outcome also explored any source needed to detect the TB cases, such as health performance, the sociaty who have the will to the contribution of the TB cases overcoming, the availability of the district health sites as the alert village, educational institution which utilizes the public health centers as the pratical sites and family too.

Based on above findings, so the researcher intends to observe how the community participation in the detection of the TB case in the distict of Pariangan, the Region of Tanah Datar by the application of the groupping of the TB observers (Pemerhati Penderita TB/PPTB) as part of the "*model corong segitiga sehat*".

METHODS

The models resulted in the earlier year must be tested to observe the model effectivity for the detection of the TB case. The methode used is the quantitative and qualitative with the design of the experimental research. The experimental design used the is one group, pre and post test meaning to observe and to compare the case findings made the group before reaching the way of the TB detection with new model and strategy, and after this group has the model testing. The expectation to see the amount of the finding the new TB case in the community. After comparing the value of the pre test and post test of the group, we will get a conclution whether the strategy and the research model are effective or not effective in the new TB case (Burns N & Grove SK, 2001).

The technique of the data collection, the data are collected after the rebuilding in the PPTB group, and the community participation can be gotten from the community activities in the PPTB group activities. Besides, the researcher also made in-depth interview to the community figures, health performers, around the public health centers appointed. The groupped discussions focused in the data collection activities through the FGD, the researcher intends to observe realistic situation in the community related with the performance and the result of the model testing which will be mode. The observation, the data collection through observation is made to directly observe the real environment of the community suspected as the TB sufferers, but undetected. The researcher made the observational form that the performance of the model testing. The observation resulth will be explained more through the focus group discussion (FGD) result.

The data are analyzed statistically with Paired Samples T Test, since in this research, the researcher is going to compare the group untrained with the one trained on the TB. The group consists os 20 persons. The statistical result gained on the data check through in the interview of the community not involved, educational institution and from the community health center. The analysis term is called triangulation applied approaching to the crosscheck in the qualitative data obtained besides strengthening by the qualitative data with the univariate and bivariate analysis approach.

The second year research location is the action research, that the researcher needs total concentration of the testing in two regions. So, the researcher held only one community health center. In each research region as the focus of the model testing and another community health center as the research target of the first year to be the controlling. The working region of the community health center which will be used for the model testing is the working region of the community health center of Pariangan, the region of Tanah Datar.

RESULTS AND DISCUSSION

This research is the model testing resulted of the earlier year. In this testing, the community involvement is the main key of the model success, since the approach applied in this research is partnership. This means the community are willing to cooperate actively all together with the community health center and educational institution to overcome the TB case. The characteristic of the community who are active in the PPTB group are the health performers, the sufferers family, the PMO, and the health personnels responsible yn the small regions. Below is the statistical table of the community participation described with the total of the contact members in the same house with the TB sufferers taken to the community health center to check up the health, especially the family members having the TB symptoms.

 Table 1
 Average Distribution of the Total Findings for the TB
 Suspects Case Based on the Pre and post Intervention in the Preliminary evaluation.

Variable	Means	SD	SE	p-value	Ν
The TB suspects findings					
a. Before intervention	6,05	1,70	0,38	0,000	2
		1	0		0
b. After intervention	1,90	1,48	0,33		
		3	2		

The average finding of the TB suspects case before the model testing in 20 personnel of the TB performers are only 2. In the preliminary evaluation after the model testing by building the group of the TB sufferersobservers obtained the average finding of the TB suspects case amounting to 6. It can be obeserved the average finding between pre and post obtaining the new model testing is 4 with deviation standars is 2,15. The statistical tedting obtained is the p-value (0,000.01). It can be concluded that there are significant differences in the TB suspects case finding of the pre and post community intervention with the new model testing. Significant differences indicate the community participation be joining the PPTB group becaming better.

After the month of training held by the educayional institution and health service of the region in the PPTB group, the final model testing is evaluated. The data shows that the case with the BTA (+) becomes 9 persons which before intervention only found 4 to 6 persons. The suspects of TB sufferers after the intervention is 14 cases compared with pre intervention is only 8 persons (12 month ago), this indicates significant increase.

The community participation in collecting teh new case of the disease and the suspects of TB is performed in the nearest environments of the performers of the health. In general they said they requested the people living in the same house with the sufferers to check up. This is emphasized because it is proven in Rika and Ervan reserach in 2009 that the highest risk of spreading of the TB is those living in the same house with the sufferers. The spreading risk is 27,12 times compered with those not living in the same house.

The above statistical result is strengthened by the interview result with community figures before the making of the PPTB group and training of the group. A figure in community in Pariangan district said:

"The people are embarrashed coming to the community health center for saliva check up since it is indecent as well as considered as magic influence, this bloody cough is cured with simlpe things."

The role of community nurses are changing the community perception on the TB disease. The community participation will never run well if the community have no good knowledge on the health (Mc. Farlane and Anderson, 2002) stated that the community nurses are challenged to arouse the spirit of community change and community health with lower level of health. Theoretically observed that the community empowerment means to develop the knowledge and skill in community ability in general, besides the empowerment in decision making has impact on the environment (Kreisberg, 1992).

The making of the PPTB group is one of efforts towards the community participation in detecting the TB case. Before obtaining information on the TB disease in the whole, community have underestimate opinions on the sufferers as stated by one of them after the recovery of the health below:

"I have been following the TB cure since 2005. Every time I asked the health performer on my cure, they always answered I don't know, so when my children visited me and I hugged the baby of my sister while coughing, no body reminded me. Every time I went out, the neighbour whispered: "Her cough is bleeding, she has consumed magic poison. "I left my village and visited Padang for some treatments. Thanks God, in nive months I am healthy as before".

A health performer said about TB information before the information is completed as follows:

"We as performers as health, made as attempt to explain and urged those with many years of chouging to visit the community health center, but since the TB information we collected was too limited, and not all the performersjoined us, we were too much speaking about the health. We just have certificates on babys health. We have only that".

Above statements need response from the health pratitioners. The community actually want to participate in the health activities around them particularly the TB. The community must know that we not only measuring babys body, but also wider knowledge and many disease. The building of the PPTB group is a place for the community in active participation in finding the TB suspects case, since they look like the apex of the ice hill on ocean.

To distribute health information and support the community to change their bad habits are not easy, since they hate to be pushed for all activities. This needs some strategies and approaches in the efforts of the disease overcoming in their region. In practice, the community nursing based on the partnership concept, friendship concept. and of course the community empowerment. Anderson and McFarlane, 2000 in their models on the community as partner have proven that in giving the community nursing care by considening them as our partner or working team, the result will be more optimal in the community health. This according to Anderson and Mc. Farlane can happen because the community is

pushed to realize the problems around them and make them overcoming the problem. People as partner can be done in a group, both with high risk of health and healthy ones as Swanson stated 1997.

The partnership with the community arouses thethe community spirit to participate to overcome the health problems in their region. This theme which the research makes in the carrying out of the testing in the "corong segitiga sehat" or funnel model of healthy triangel. The existence of the partnership between the educational institution as the user of the practical land in the community, the health service in this case the community health center which takes the responsibility in the health working region and the community. This three componens can not be separated to improve and to increase the community participation for the health improvement.

The positive response of this partnership is well and friendly welcome by the community with an existence level in the every meeting done is exceeding the determined quota. This positive response was stated by a figure from the administrative district of Pariangan and the health service. He said "It is absolutely necessary to make particular cooperation of the health education and the public health center to educate related performers on the health problems. That the students who practise their study in the community who have received the TB materials always get clear informations and current knowledge in their education.

As the partner in the health service, the educational institution and the public health center officers will share the information mutually in the group or team of the community nursing or in the community. This is supported by Savage (1998) in his article which stated that the group involvement in the management of the health service should be more considered and emphasized. The community group who assemble in one institution will become the part of the community nursing service management to complete a problem of the community health.

Savage opinion (1990) is almost identical with Gallo, Reichel and Anderson (1998) who stated that source of social support consists of the both formal and informal supporting system. The formal supporting system needed by the TB sufferers undetected as well as detected is the existence of the social security team, curing program, health practitioners, and government, while the informational supporting system is family and friend. Besides the nuclear family and other members mean significant for the TB sufferers in the treatment and medical check up when they complain the disease. Furthermore, Savage (1998) supported that in the health service management, a support system is necessary from the community. The same as means ans Smith's opinion (1994) in

savage (1998) that the support from the community in the health service management, has function to offer the choice of service needed by the community in general.

CONCLUSIONS

The community participation in collecting new TB case in the District of Pariangan in the post performance of the new model of the detection of the TB case through the "Corog Segitiga Sehat" has indicated extraordinary progress. This can be observed of the average value of the collecting of the TB suspects, every performers of the health reaches 6 persons which was before only 2. The community groupped in the PPTB can share knowledge and the methode of communication with the suspected TB sufferers to check up their health in the puclic health centre. The collected the suspect of this disease needs the follow up check up such as saliva check up to make conclusion whether the suspects are positive or not. The community participation should be supported with their legality as the funnel of information distribution on the health knowledge among the community. And therefore, the commitment in the "Corong Segitiga Sehat Model" must be constantly maintained, that the community in this case the PPTB group have mode self-confidence and mode open hearted and open minded in facing the TB sufferers and the TB suspects. It is suggested for the government in the local regions to participate in active movements as one of the component of the "Corong Segitiga Sehat Model", because the influence of the local governments to increase and improve the community participation in the health are greater.

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