

DIGITAL COMMUNICATION TO ADDRESS EDUCATION AND SPUTUM EXAMINATION OF TB PATIENTS

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ABSTRACT

The Covid-19 pandemic has caught the attention of not only Indonesia but the whole world. The 3M movement, namely wearing a mask, washing hands and keeping a distance to minimize the transmission of tuberculosis is very beneficial for eradicating TB tuberculosis. However, this is a challenge for microscopists at PUSKESMAS Referral Microscopy (PRM) in educating and handling sputum of tuberculosis patients who are currently on medication. The purpose of this study was to test VisKomLAM 1, 2, 3 and 4 in bridging communication between officers in education on sputum handling for tuberculosis sufferers at every examination during the Covid-19 pandemic. The research location took PRM Tuminting, Wawonasa and Tikala Baru in Manado City and Telaga PRM in Gorontalo Regency. Analysis with paired t tests obtained a significance of below 5%, which means that VisKomLAM 1, 2, 3 and 4 can bridge education from officers to tuberculosis sufferers in the era of the co-19 pandemic. It is recommended that health workers always strive for tuberculosis health promotion in achieving tuberculosis elimination by 2050.

Keywords: *Digital Communication, Education, Sputum, Tuberculosis*

INTRODUCTION

Under current conditions, the treatment of tuberculosis (Tb) must remain a concern. The World Health Organization (WHO) reports that Indonesia is in the third position with the highest cases of Tb in the world. While the first and second positions are currently India and China(1,2,3). Massive restrictions on society due to Covid-19 have been very beneficial in the spread of tuberculosis to the wider community, but the attention of the entire world community at this time which is focused on Covid-19 has caused people's concentration to be pushed aside. especially if you see a cough for more than 2 (two weeks) is an early sign/symptom of TB. Initial diagnosis in people with early symptoms of tuberculosis cannot be done quickly due to the pandemic(4,5).

A good initial diagnosis is indispensable in increasing the case detection rate (CDR). During this pandemic, it was not only the cdr that was disrupted, but also the tb treatment success rate (SR)(6,7,8,9). It is not only health workers who are responsible for this, but also all parties. The obstacle found was the limitation of gatherings in the community, which also made it difficult for officers to quickly find TB sufferers and increase the success of their treatment. It takes a wise way to overcome this(10,11,12,13). Digital media is recognized as making it easier to get around health worker services and can also be a bridge in educating TB control program officers (P2TB) for tuberculosis sufferers to collect purulent sputum and how to cough properly.

RESEARCH METHODS

Research design

This type of research is action research using an applied design whose main objective isto facilitate social change.

Population and sample

Population :TB cadres; Medication Reminder; Housemates; Health Workers at MRC Tikala Baru; Wawonasa; Tuminting Manado City and MRC Telaga Biru Gorontalo Regency. Samples : For each MRC, each type of population is taken 10.

Materials and tools

1. VisKomLAM 1, as a media for health promotion for sufferers, cadres, household members, PMO and health workers when sufferers are suspected of being exposed to M.Tb
2. VisKomLAM 2, as a media for health promotion for sufferers, cadres, household members, PMO and health workers when the patient is on his second treatment visit.
3. VisKomLAM 3, as a media for health promotion for sufferers, cadres, household members, PMO and health workers when sufferers make their third treatment visit.
4. VisKomLAM 4, as a media for health promotion for sufferers, cadres, household members, PMO and health workers when patients make their fourth treatment visit

Collection / stages

1. Out of 4 (four) MRC, namely 3 in Manado City and 1 in Gorontalo District, each is taken : 10 respondents TB cadres, 10 respondents Medication Reminder, 10 respondents Housemates, 10 respondents Health Workers.
2. Given a pretest
3. Watch the video based on the respondent's visit category
4. Given a post test
5. Data analysis : Analysis of univariate research data using descriptive and multivariate using paired t test

RESULTS AND DISCUSSION

From the public test on the use of digital communication, in this case VisKomLAM 1, 2, 3 and 4, as many as 65% are women, because women care more about health, as written by Giovanni et al(14). In terms of education, the public test was carried out as much as 12% was High School, this is in line with Hogan et al's research(15) and Linda et al(16) which said that many High School educational backgrounds require tuberculosis education.

The age of the respondents in the public VisKomLAM test 1, 2, 3 and 4 is 2 age groups, namely under 36 years and 43-48 years the percentage is 13, which explains that education through digital communication is currently very popular with young people and is needed by groups mature age. In line with the results of research conducted by Visca, et al(5) who wrote that in the digital era communication is needed that is popular and hits the target.

In the VisKomLAM 1, 2, 3 and 4 public tests, it was found that state civil servants (14%) needed digital communication in tuberculosis education. Health workers as state civil servants in health facilities are the spearhead of the successful elimination of tuberculosis. In line with what was written by Møllergaard et al(17), that the state civil apparatus must be responsive to technology to help the success of government programs. The results are displayed in the univariate form of the characteristics of the respondents in table 1.

The use of digital communication, in this case VisKomLAM 1, 2, 3 and 4 can increase knowledge and understanding for TB cadres, housemates, medication reminders and health workers at the MRC. This can be seen in table 2.

Table 1. Characteristics of Respondents

No	Participant Characteristics	f	%
1	Participant Role		
	Tb Cadre	10	25
	Medication Reminder	10	25
	Home People	10	25
	Health workers	10	25
2	Gender		
	Woman	26	65
	Man	14	35
3	Education		
	Junior High School	7	18
	High School	12	30
	Diploma	10	25
	Bachelor	11	28
4	Age		
	< 36	13	33
	37-42	11	28
	43-48	13	33
	49-55	2	5
	> 56	1	3
5	Work		
	Housewife	11	28
	Private	8	20
	Retired	1	3
	Freelance Honors	6	15
	State Civil Apparatus	14	35

Source: Primary Data

Table 2. Multivariate analysis with paired t test

	t	df	Sig
Before x After	-13,81	39	0

CONCLUSION

In educating sputum handling in tuberculosis cases during the digital era, communication is needed using technological media such as VisKomLAM 1, 2, 3 and 4, which can increase the knowledge and understanding of TB cadres, householders, medication reminders and health workers with a significance number of 0.000.

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