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Educational Model Utilization of Family Medicine Plants as a Behavior Improvement about the Importance of Keeping Health Teeth and Mouth of Cadres

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Abstract:- Using attractive integrated media for health promotion can increase knowledge and change behavior. Knowledge can be influenced by the provision of video media. Behavior based on correct knowledge will greatly affect the incidence of dental and oral health problems. The Government of Indonesia supports the use of TOGA to improve the health of the Indonesian people, through the Minister of Health Regulation Number 9 of 2016 concerning efforts to develop health through self-care (Asman) the use of TOGA and skills in its cultivation and processing. The purpose of this study was to produce an educational model for the use of family medicinal plants with a design whose effective application could increase knowledge, attitudes, and skills about the importance of maintaining oral and dental health in cadres. The type of this research is Research and development (R&D) there are five stages, namely: information collection, model design, expert validation, and model testing. Quasy Experiment method (One-group pretest-posttest design). The research sample is 30 posyandu cadres, the sampling technique used is non- probability sampling, with the type of total sampling.

Results: Educational model for the use of family medicinal plants through appropriate videos as an educational medium about the importance of maintaining oral health in cadres and their application is effective in increasing knowledge (p-0.000), attitudes (p-0.000), and skills (p-0.000).

Conclusion: Educational model for the use of appropriate family medicinal plants as educational media and its application is effective in increasing behavior about the importance of maintaining oral health in cadres.

Keywords:- *Education, TOGA, Behavior, Oral and dental.*

I. INTRODUCTION

Health Law Number 36 of 2009 Article 47 states that health efforts are carried out in the form of activities with promotive, preventive, curative and rehabilitative approaches that are carried out in an integrated, comprehensive and sustainable manner. The implementation of these health efforts is carried out through various activities, one of which is in the field of dental and oral health (Kemenkes RI, 2009). Dental and oral health is an inseparable part of others, because dental and oral health also affects the health of the body (1).

Prevalence of dental problems and the mouth in Indonesia is still very large. Based on the 2018 Basic Health Research (Riskesdas), 57.6% of Indonesians have dental and oral problems. This is because many individuals think that oral health is less important than other body health problems that are of great concern. The tendency to ignore oral health is usually based on a lack of knowledge about oral health.

The dental and oral health status of a person or community is influenced by four factors, namely heredity, environment, behavior and health services. Behavior has an important role in influencing dental and oral health standards (2). Dental and oral health is closely related to behavior. The behavior of maintaining good oral and dental health will play a very important role in determining the health status of each individual. Therefore, the behavior of maintaining dental and oral health that is not good must be changed. The environment plays a very important role in shaping one's behavior, in addition to innate (3).

Health education through video media is one of the teaching techniques that has many advantages because the media is a source of information that can affect a person's level of knowledge. Knowledge can be influenced by the provision of video media because video media can reflect a more effective absorption of information by using the senses of sight and hearing and can increase knowledge compared to only using the sense of sight. Video is pictures in frames, where frame by frame is projected through the projector lens mechanically so that the screen looks like a live image (4).

We need a media that can be used as a socialization media related to medicinal plants in Indonesia. Seeing this

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condition, an alternative treatment was sought using natural ingredients because it can be seen from the data on the proportion of TOGA utilization in South Sulawesi (Riskesdas 2018) which is quite high, as much as 49.4%. TOGA is also believed to have no harmful side effects and the price is more economical.

The Indonesian government supports the use of TOGA to improve the health of the Indonesian people, through Regulation of the Minister of Health Number 9 of 2016 concerning efforts to develop health through self-care (Asman) the use of TOGA and skills in its cultivation and processing (Kemenkes RI, 2016).

Researchers are interested in making an Educational Model for the Use of Family Medicinal Plants as an Effort to Improve Behavior About the Importance of Maintaining Dental and Oral Health in Cadres to increase the knowledge, attitudes and skills of cadres so that they are able to maintain their dental and oral health independently.

II. METHODS

The method used in this research is *Research and Development (* R&D). The R&D method is the method used to generate the model and test its effectiveness, this research is a mix-method research, namely research that combines qualitative and quantitative approaches in producing a model, collects data using descriptive methods and tests the effectiveness of the model with analytical methods.

III.RESULT

The results of the model design are used to assess the feasibility of the product/model to certain experts, namely by conducting expert validation tests. There are 3 expert validators, namely: Dr. Imam Sarwo Edi, S.Si.T.,M.Pd as media expert, Bambang Yunianto, SKM, M.Kes as herbal medicine expert and Dr. Teuku Salfiyadi, SKM, M.Pd as a dental and oral therapist. This assessment is made through a checklist sheet consisting of relevant and irrelevant interpretations.

No	Name	Expert	Model eligibility score	Average	*P-Value* *
1	Dr. Teuku Salfiyadi, S.KM., M.Pd.	Dental and oral therapist	10	9.00	0.000
2	Dr. Imam Sarwo Edi, S.Si.T.,M.Pd.	Media Expert	10		
3	Bambang Yunianto, S.KM., M.Kes.	Herbal Medicine Expert	7		
**interclass correlation coefficient*					

Table 1: Expert Validation Results

The results of expert validation with a *p-value of* 0.000 indicate that the educational model for the use of family medicinal plants is relevant and feasible as an educational model in an effort to increase knowledge, attitudes and skills about the importance of maintaining oral and dental health in cadres.

Characteristics	Intervention	
	F	%
Age		
30TH	5	16.67
31-40TH	7	23.33
41-50TH	14	46.67
51TH	4	13.33
Total	30	100
Education		
junior high school	6	20
senior High School	24	80
Total	30	100

Table 2: Frequency Distribution of Respondents Characteristics

The number of respondents based on age in general is 41-50 years. While the number of respondents based on the level of education in general is the high school level.

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Variable	N	Sum	mean		Std. Deviation
	Statistics	Statistics	Statistics	Std. Error	Statistics
Knowledge (Pre Test)	30	120.00	4.0000	.22994	1.25945
Knowledge (Post Test)	30	152.00	5.0667	.21937	1.20153
Attitude (Pre Test)	30	679.00	22.6333	.26034	1.42595
Attitude (Post Test)	30	773.00	25.7667	.29040	1.59056
Skills (Pre Test)	30	88.00	2.9333	.21937	1.20153
Skills (Post Test)	30	90.00	3.0000	.22994	1.25945
Pretest Educational Utilization Model TOGA	30	887.00	29.5667	.40876	2.23889
Educational Posttest of TOGA Utilization Model	30	1015.00	33.8333	.42907	2.35010
Valid N (listwise)	30				

Table 3. Average Value of Community Knowledge, Attitudes and Skills

Overall, by combining the values of the three elements of the TOGA Utilization Education Model which consists of elements of knowledge, attitudes, and skills, it shows that the average *pretest score of 29.57 has increased to a posttest* average value of 33.83 after receiving education on the use of family medicinal plants as an effort to increase behavior about the importance of maintaining dental and oral health in cadres.

Variable	Kolmogorov-Smirnov [a]			Criteria
	Statistics	df	Sig.	Normal = sig > 0.05
Knowledge (Pre Test)	.153	30	.071	Normal
Knowledge (Post Test)	.155	30	.062	Normal
Attitude (Pre Test)	.138	30	.149	Normal
Attitude (Post Test)	.142	30	.128	Normal
Skills (Pre Test)	.155	30	.062	Normal
Skills (Post Test)	.153	30	.071	Normal
Pretest Educational Utilization Model TOGA	.139	30	.144	Normal
Educational Posttest of TOGA Utilization Model	.139	30	.147	Normal

Table 4: Normality Test Results

Based on the results of the normality test, it shows that all data groups of knowledge level, attitude value, skill level, and the combined value of the three elements of the education model for the use of TOGA, both *pretest* and *posttest* values are normally distributed where the significance value is > 0.05.

Test of Homogeneity of Variances				
Variable	Levene Statistics	df1	df2	Sig.
Knowledge Result	.068	1	58	.796
Attitude Results	.112	1	58	.739
Skill Results	.068	1	58	.796
TOGA Utilization Educational Model	.040	1	58	.842

Table 5: Homogeneity Test Results

The test results show that all variables have a significance value > 0.05. Therefore the data is homogeneous. Based on the results of the assumption test, the analysis used next is parametric analysis, namely the *Paired T Test* to test the minor and major hypotheses.

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	Knowledge (Pre Test) & Knowledge (Post Test)	30	.957	.000
Pair 2	Attitude (Pre Test) & Attitude (Post Test)	30	.980	.000
Pair 3	Skills (Pre Test) & Skills (Post Test)	30	.957	.000
Pair 4	Pretest Educational Utilization Model of TOGA & Posttest Educational Utilization Model of TOGA	30	.956	.000

Table 6: Paired T-Test Values Pre-Test and Post-Test

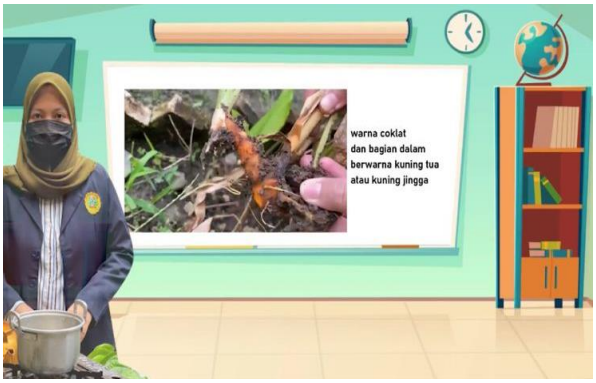
The table above shows that the level of knowledge, attitudes, skills, and combined value of the Educational Model for the Utilization of TOGA Posyandu cadres in Labokong Village in the use of family medicinal plants experienced a significant increase in the average value after receiving education marked with a significance value of 0.000 < 0.05.

Based on the table above, it shows that the education model for the use of family medicinal plants in Posyandu

cadres in Labokong Village has an influence on the knowledge level of 95.7%, the attitude value of 98%, and the skill level of 95.7%. So overall, the combination of the three elements of the Family Medicinal Plant Utilization Education Model on Posyandu cadres in Labokong Village has an effect of 95.6%.

IV. PRODUCT/MODEL

The product in the form of an educational model for the use of TOGA is a model that can improve behavior about the importance of maintaining oral and dental health in cadres . The educational model for the use of TOGA contains family medicinal plants, namely betel leaf, ginger, and turmeric which contains an explanation of plant characteristics, plant content, benefits and processing methods.



Turmeric Family Medicinal Plant Video Display

The video can be viewed via the following link:

https://drive.google.com/file/d/1KeUCJvWUKx6QV5_e20mriQIBdkqzQBPe/view?usp=sharing

V. CONCLUSION AND RECOMMENDATIONS

Based on the results of the study, it can be concluded that the educational model for the use of family medicinal plants is effective as an effort to increase the behavior of the importance of maintaining dental and oral health in cadres. The suggestion that the researcher can convey is that further research is needed to increase the number of plants for the use of family medicinal plants on dental and oral health and the effect of confounding variables on increasing behavior about the importance of maintaining dental and oral health in cadres.

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