The Role of the Government and Health Educators on Community Behaviour and Its Impact on Oral and Dental Health in the Work Area of the Public Health Center in Central Mamuju District

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Abstract
This study aims to measure and analyze the government and health educators' role on community behaviour and its impact on oral health in the Durikumba Public Health Center, Karossa District, Central Mamuju Regency. It was researched at the Durikumba Public Health Center, Karossa District, Central Mamuju Regency. The sampling technique used was Stratified Proportional Random Sampling. The total population was 2766, and the final sample obtained was 346 samples. The analysis tool used is path analysis using SPSS version 25.0 software. The results showed that among the variables that became the indicators of this study. The variable of government's role had the highest significance value concerning community behaviour, dental and oral health, and the relationship through intervening variables (community behaviour) in the Work Area of PHC Lara Karossa District, Middle Mamuju. On the other hand, variables with nominal values are shown in health educators' influence, both with community behaviour, oral health, and the relationship through intervening variables (community behaviour) in the Lara Public Health Center Work Area Karossa District, Middle Mamuju. Thus, the government's role has a more significant influence on public action and oral health because it is considered the dependent variable directly and indirectly. Meanwhile, health educators' variable needs to be improved with the ability of extension workers to encourage and convince the public and the world of health at large.

Keywords: Government, Health Extension, Community Behavior, Health, Indonesia

1. Introduction
In Indonesia, toothache is in the top 10 diseases with most public complaints (Department of Health, 2008). The national prevalence of dental and oral health problems in Indonesia is 23.5%. As many as 19 provinces have a majority of dental and oral health problems above the national prevalence, one of which includes Mamuju District, Karossa
District, where the highest caries prevalence above 50% is in Karossa District, namely, 52.3%, this includes 1 in 10 areas with the highest caries prevalence rate (MOH, 2007). Tooth and mouth disease can cause pain and tooth loss. This can affect the appearance, quality of life, growth, and development of children. Caries or cavities and periodontal disease are the most common diseases found in the population, and 80% are experienced by school-age children in several countries (Eddy & Mutiara, 2015).

Currently, oral health problems are still a complaint among the public; according to the data (Health Research and Development Agency, 2013), the national prevalence of dental and oral problems is 25.9%. The National DMF-T figure is 4.6, which means that the Indonesian population's average tooth decay is five teeth per person. The national prevalence for daily brushing is 94.2%, and obeying and following proper advice on brushing, for example, after breakfast and before bed at night, is only 2.3%. As many as 76.6%, most people brush their teeth when they want to take a shower. This bad habit has resulted in caries conditions above 70% of Indonesian society.

The Household Health Survey (SKRT) reported by the National Ministry of Health in 2010 shows that of the ten disease groups that many people complain about, teeth and mouth disease are in the first rank of 60%. Data from the Directorate General of Yanned, Ministry of Health of the Republic of Indonesia in 2010 showed that oral and dental disease was ranked 8th among ten outpatient conditions.

Efforts to prevent tooth decay would be best made from an early age. Oral and dental health efforts become a comprehensive activity of the PHC, carried out in an integrated manner, and include prevention, recovery, and healing actions. The training referred to is carried out by the PHC, whether inside or outside the building.

An extension is a form of promotional efforts in implementing dental health programs in the community. These efforts tend to focus more on Education or providing an understanding of dental health. This is usually done by schoolteachers who have been previously trained. They can do this by including lessons on oral health. The goal is to achieve the optimal degree of dental and oral health. This health program counseling's objective in the community is to have knowledge, habits, actions, and attitudes to maintain good oral health (Dewanti & Hayati, 2012).

According to (Dewanto, I & Lestari, 2014), the government's efforts to increase knowledge of dental and oral health in the community have not resulted in satisfactory results. The methods and media in their counselling are not by the designation of children's psychology. The material or material being taught becomes less lasting on children in the long run. The success of development in the health sector in Indonesia is related to active participation. One of the roles played by both the public and the private sector in implementing this health effort is realizing through the efforts of individuals, families to Community-Based Health Efforts or UKBM. This UKBM has developed like an Integrated Service Post (Department of Health RI, 2011).

According to the Regional autonomy policy, the Government of the Mamuju Regency, Karossa District, can provide health services. Also, it has been implemented based on the Regent Regulation regarding the Implementation of the Community Health Service Program in Mamuju District, Karossa District for Health Care Facilities in Mamuju Regency. The implementation of the program includes health services aimed at health protection for all people in Mamuju Regency.

This description is considered necessary to promote promotional efforts such as continuous dental and oral health education. Therefore, the authors are interested in conducting a research entitled "The Role of Government and Health Educators on Community Behaviour and Its Effects on Dental and Oral Health in the Study Area of Durikumba Public Health Center. Karossa District, Middle Mamuju."

2. Literature Review
2.1. The role of government and community behaviour
The government has a role in educating the nation's life and has a role in influencing the community's behaviour or its citizens. The government's position can be reflected in maintaining security and order in society as a social servant and a driver of initiatives. This view is by what was stated by (Harefa 2012) that the role of government could be seen in three forms, namely: 1) the government as the guardian of order/security; 2) the role of the government as a social representative for the needs that must be regulated in society, and 3) the role of the government as an entrepreneur or initiator in the community. Another study was also put forward by Vita Yohana (2005) that the government in its power can act as a stimulus and impetus for changes in people's behaviour. Behaviour is a form of individual
manifestation through interaction in the environment, from visible or not visible behaviour, from what is felt to what is not (Suharti, 2016). Based on this view, the following hypothesis is formulated:

H1: The government's role has a significant favourable influence on community behaviour; the higher the part of the government, the better the behaviour in the Durikumba Public Health Center, Karossa, Central Mamuju Regency.

2.2. Health and community behaviour educators

The communications provided can have direct or indirect impacts, can have short and long-term effects. In counselling, communication is essential where communication is a statement between people, both individually and in general groups. In health education, communication science is very much needed as a basis for conveying messages to targets. (Yuniarti et al., 2013) The provision of public health counselling or counselling has a positive and significant effect, and other findings from researchers (Salamah & Sulistyani, 2018) found a positive and significant influence between public health education and community perceptions behaviour.

Health educators' importance to community behavior to increase disease prevention efforts is considered an essential part of maximizing health values' output. Behavioural problems are the cause of various health problems. Public health professionals agree that to overcome them, a process or effort is needed in the form of health education (health education) as a learning process to realize the "process of change" (Ngatimin, 2011). Based on this view, the following hypothesis can be formulated:

H2: Health educators have a significant positive effect on community behaviour; the better the health educators, the better they will affect the community's behaviour in the Durikumba Public Health Center, Karossa, Central Mamuju Regency.

2.3. The role of government and oral health

The role is a concept of what a person/individual can do in society as an organization; a part can mean necessary behavior in society's social structure (Soekanto, 2017). The government's role, such as increasing health value, requires community contribution because this role's success depends on participation. The higher the participant's success, the higher the win if the opposite is true. Therefore, participation is essential to support the success of the government's program or role. According to (Syafruddin 2007) that the successful implementation of government roles/programs is related to the participation or active involvement of community members, whether in a system unit or individual, becomes an essential integral part because, in principle, the role given by the government is shown in the realization of a healthy and healthy society. prosperous (Heningtyas, 2014); (Kurniawan et al., 2020; Mu'adi et al., 2020). The government has a positive and significant impact on the implementation of service provision, including in the public health sector. Also, Wiris Andespi (2016) also found that the role has a significant role in health development, not only in the curative aspect but more on prevention. Based on this view, the following hypothesis can be formulated:

H3: The role of the government has a significant positive effect on dental and oral health; the higher the part of the government, the more it will improve dental and oral health in Durikumba Public Health Center Work Area, Karossa District, Central Mamuju Regency.

2.4. Health and dental health educators

Health educators convey the vision and mission of health, especially in the field of public health. Still, more than that, extension workers have a significant role and role in creating good health conditions in the community. Health educators' dental and oral health findings have not achieved their goals regarding dental and oral health (Kanto et al., 2020; Lionardo et al., 2020; Rachman et al., 2019). Mainly at health centers in general, aim to achieve the community's teeth and mouths' health conditions and raise awareness for the public about maintaining dental health. Protection to strengthen teeth and their tissues and reduce the effects can damage dental health (Tampubolon, 2010). Based on this view, the following hypothesis can be formulated:

H4: Health educators have a significant positive effect on oral health; the better health education, the better oral health in Durikumba Public Health Center, Karossa District, Central Mamuju Regency.

2.5. Community behavior and oral health

High awareness from the public about the importance of health services, especially in maintaining oral health, is an essential aspect of its positive and significant impact on dental and oral health. Indicators of community behavior provide an understanding that the behavior that exists in a particular community is expected to create awareness, interest, make considerations, try and adopt. Behaviour is an activity of living things. Human behavior as an activity and human action itself has a broad scope, such as talking, crying, working, laughing, writing, walking, reading, and
so on (Notoatmodjo, 2007). The findings (Sebastian et al., 2017) in their research on dental and oral health behavior in Banjar Regency and (Lely Suratri et al., 2016); (Nuraini et al., 2019; Umanailo, 2020, 2019) in their study on attitudes, knowledge. Parents' behavior regarding dental and oral health in Banten Province said that behavior positively and significantly impacts oral health. Based on this view, the following hypothesis can be formulated:

H5: Community behavior has a significant positive effect on oral health; the better the community's behavior, the better the oral health in Durikumba Public Health Center, Karossa, Central Mamuju Regency.

3. Methods

This study uses a quantitative approach with a correlational design, namely the relationship between independent, intervening, and dependent variables. Independent variables (independent) include the role of the government (X1) and health extension workers (X2); The intervening variable is community behavior (Y), the dependent or dependent variable is oral health (Z). The research approach is quantitative, is a method of testing theory through the relationship between variables. According to the opinion (Creswell, 2003), these variables are measured using instruments so that the data includes numbers that can be analyzed according to statistical procedures.

This research was conducted at PHC Durikumba, Karossa District, Central Mamuju Regency. The location selection was based on the Lara PHC, Karossa Central Mamuju Regency, representing government research, health educators' role on community behavior, and its impact on dental and oral health. This research lasted for two months (September - October 2019). Data collection was carried out through questionnaires, interviews, and documentation. Sugiyono (2005) defines population as a generalization area covering objects or subjects with unique quantities and characteristics as researchers determine to study and draw conclusions. A total of 2766 populations using Stratified Proportional Random Sampling and the Slovin formula (Umar, 1999) obtained a final sample of 346 respondents.

3.1 Variable measurement

The variables in this study were measured using a Likert scale range of 1-5. The number 1 (one) indicates the criterion strongly disagrees, and the scale 5 (five) indicates the bar strongly agrees with the questionnaire's statement.

The government's role referred to in this study is the government's role in the health sector as stipulated in Law no. 40 of 2004. Regulation of the Minister of Health No.71 / 2013 concerning Health Services - National Health Insurance, health facilities are facilities used in individual health care efforts, whether promotive, preventive? The government and society carry out curative or rehabilitative. Indicators referring to Law Number 40 of 2004 include: 1) cooperation; 2) non-profit; 3) openness, prudence, 4) accountability, efficiency, and effectiveness; 5) portability, membership is mandatory; 6) trust funds; and 7) results of social security fund management.

Health counseling, referred to in this research, is an activity that has input, process, and output. Health education is a combination of activities/activities and opportunities based on learning principles to achieve conditions where individuals or families or groups or communities want to experience a healthy life and know-how and do what can be done, whether individually or in groups. The indicators refer to (Notoatmodjo, 2007), namely: 1) Individual extension methods, 2) Group extension methods, and 3) Mass extension methods.

Community behavior referred to in this research is a behavior or process that is carried out repeatedly. Behavior cannot occur suddenly. The indicator used refers to Rogers in (Notoatmodjo, 2007); namely 1) Awareness; 2) Interest; 3) Considering; 4) Trying (trial), and 5) Adopt. Oral health, as referred to in this research, is the impact caused by tooth decay which can interfere with the implementation of activities. The indicators used to refer to (Tampubolon, 2010), namely, 1) Limitations of tooth function; 2) Physical disabilities; 3) Pain every time you chew; 4) Psychic discomfort, and 5) Psychological disabilities.

4. Results

This study uses SPSS (Statistical Product & Service Solution)16.0 for the window before the data processing is done. The first test of the validity and reliability of questionnaires. Test validity with significance test 0.05 with the 2-tailed test by comparing recount with r table. The calculated R-value is taken from the Cronbach Alpha column Correlated Item Total Correlation. Meanwhile, the r table obtained using formula df= n-2 (Sugiyono, 2012). Thus, the number of samples in this study as many as 346 respondents means df = 346-2 = 344. they are resulting in an r table value of 0.095.
The results of the processing of questionnaire data can be known as the validity of each question item with valid values on all variables (role of government, health extension, public behavior, and dental and oral health). Reliability testing of each research variable's question items using Cronbach Alpha is considered reliable if its Cronbach Alpha is > 0.6 (Ghozali, 2011). Based on the table below, the Cronbach Alpha value of all variables tested has a value above 0.60. As shown in the following table:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of Items</th>
<th>Cronbach Alpha</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Role (X1)</td>
<td>7 Item</td>
<td>0.793</td>
<td>Reliable</td>
</tr>
<tr>
<td>Health Extension (X2)</td>
<td>3 Item</td>
<td>0.861</td>
<td>Reliable</td>
</tr>
<tr>
<td>Community Behaviour (Y)</td>
<td>5 Item</td>
<td>0.805</td>
<td>Reliable</td>
</tr>
<tr>
<td>Dental and Oral Health (Z)</td>
<td>5 Item</td>
<td>0.807</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

**Source:** processed data, 2019

### 4.1 Descriptive Statistical Analysis

Descriptive statistical analysis in this study is an analysis used to describe respondents' perception of the items or details of statements submitted in the questionnaire. Respondents answer numbers start from numbers 1 to 5 in each item of the questionnaire statement of each variable studied.

Research conducted in the Working Area of Lara Health Center, Karossa, Central Mamuju Regency. Variables studied are the Role of Knowledge (X1) and Environment (X2) as independent variables / free, Student Behaviour (Y1) as a variable moderating/intervening, and Dental and Oral Health (Y2) as dependent variables / bound.

### 4.2 The role of parental knowledge (X1)

The instruments used in this study show that the variables of the role of parental knowledge are grouped into seven indicators, namely: 1) cooperation; 2) Non-profit; 3) Openness, prudence; 4) accountability, efficiency, and effectiveness; 5) Portability; participation is mandatory; 6) Trust Fund and 7) the results of the management of collateral fund social. In general, a description of the results of the study on government role variables can be shown below.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Sum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1.1</td>
<td>346</td>
<td>2</td>
<td>5</td>
<td>1446</td>
<td>4.18</td>
<td>.577</td>
</tr>
<tr>
<td>X1.2</td>
<td>346</td>
<td>2</td>
<td>5</td>
<td>1423</td>
<td>4.11</td>
<td>.551</td>
</tr>
<tr>
<td>X1.3</td>
<td>346</td>
<td>2</td>
<td>5</td>
<td>1450</td>
<td>4.19</td>
<td>.573</td>
</tr>
<tr>
<td>X1.4</td>
<td>346</td>
<td>2</td>
<td>5</td>
<td>1430</td>
<td>4.13</td>
<td>.549</td>
</tr>
<tr>
<td>X1.5</td>
<td>346</td>
<td>3</td>
<td>5</td>
<td>1455</td>
<td>4.21</td>
<td>.534</td>
</tr>
<tr>
<td>X1.6</td>
<td>346</td>
<td>3</td>
<td>5</td>
<td>1425</td>
<td>4.12</td>
<td>.544</td>
</tr>
<tr>
<td>X1.7</td>
<td>346</td>
<td>3</td>
<td>5</td>
<td>1446</td>
<td>4.18</td>
<td>.572</td>
</tr>
<tr>
<td>Scor Total</td>
<td>346</td>
<td>21</td>
<td>35</td>
<td>10075</td>
<td>29.12</td>
<td>3.103</td>
</tr>
</tbody>
</table>

**Source:** Data processing, 2019.

Based on Table 2, information can be obtained about the variable description of the government's role in the Working Area of Lara Health Center, Karossa, Central Mamuju Regency. The ideal score on this variable is 5 x 7 x 346 = 12,110, where 5 is the highest answer score, 7 is the number of statement items, and 346 is the number of respondents. The number of score percentages of variables is 10.075/12.110 x 100 % = 83.19%. Thus, the variable role of government amounted to 83.30% of the expected (100%).

### 4.3 Health Extension (X2)

The instruments used in this study show that the variables of health extension are grouped into 3 (three) statements, namely: 1) Individual counseling methods, 2) Group counseling methods, and 3) Methods of mass counseling. In general, the description of the study results on these health extension variables can be shown from the results of the analysis in table 3.
Table 3. Descriptive Analysis of Health Extension (X2)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Sum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>X2.1</td>
<td>346</td>
<td>2</td>
<td>5</td>
<td>1446</td>
<td>4.18</td>
<td>.577</td>
</tr>
<tr>
<td>X2.2</td>
<td>346</td>
<td>3</td>
<td>5</td>
<td>1427</td>
<td>4.12</td>
<td>.564</td>
</tr>
<tr>
<td>X2.3</td>
<td>346</td>
<td>3</td>
<td>5</td>
<td>1451</td>
<td>4.19</td>
<td>.554</td>
</tr>
<tr>
<td>Total</td>
<td>346</td>
<td>9</td>
<td>15</td>
<td>4324</td>
<td>12.50</td>
<td>1.514</td>
</tr>
</tbody>
</table>

Source: Data processing, 2019.

Based on Table 3, information can be obtained about the description of health extension variables in the Working Area of Lara Health Center, Karossa, Central Mamuju Regency. The ideal score on this variable is $5 \times 3 \times 346 = 5190$, where 5 is the highest answer score, 3 is the number of statement items, and 346 is the number of respondents. The percentage number of scores of variables is $\frac{4324}{5190} \times 100 \% = 83.31 \%$. Thus, the variable health extension in the Working Area of Lara Health Center, Karossa, Central Mamuju Regency amounted to 83.31% than expected (100%).

5. Discussion

The influence of the government role variable (X1) on community behaviour is positive and significant. This result is in line with Kurniawati's (2016) findings, which states that the government's role is enormous in the occurrence of changes in society, both in changes in attitudes and perceptions. Another study was also put forward by Vita Yohana (2005) that the government in its power can act as a stimulus and impetus for changes in people's behaviour. Behaviour is an individual manifestation in interacting with the environment, from visible to non-visible behaviour, felt not to felt (Harefa, 2012). Behaviour resulting from various experiences and human interactions with the domain is manifested in knowledge, actions, and attitudes behaviour as an individual's response to external or internal stimuli (Notoatmodjo, 2012). Meanwhile, according to (Wawan & Dewi 2012), behaviour is an observable action and has a specific frequency, duration, and purpose. Behaviour is a set of factors that interact with one another.

The influence of the health educator variables on community behaviour was negative and insignificant. Health educators are related to an extension agent's delivery or communication patterns to their audience (the community). The communications provided can have direct or indirect impacts, can have short and long-term effects. Negative and insignificant results from the influence of the relationship between the two variables (health educators and community behaviour) can be caused by influencing factors so that target achievement cannot be felt. The method of delivery of extension is critical to be able to attract the audience, such as how extension workers can provide awareness, interest, make considerations, try until they finally adopt the concept given. In principle, providing counselling as a strategy in giving understanding to audiences both individually and in groups, extension becomes essential if carried out by extension standards, namely providing knowledge that can change their behaviour for the better. This is inconsistent with the findings of this study. According to the bars, the health educators did not offer counselling and lost the targeted community's follow-up. This view is not in line with the findings (Pinta Marito, Savedra Pratama, Hendro Priyo Dwi Utomo Henri Koesmaningati, 2018). It states that counselling is a process of changing behaviour (knowledge, attitudes, and skills) in the community to know, want, and implement changes to improve welfare. The results found are not in line with the findings (Yuniart et al., 2013) that the provision of counselling or public health counselling has a positive and significant effect and other researchers' results (Syafruddin, 2007), who found a positive and significant influence between public health education and perceptions and people's behaviour?

The influence of the government role variable on dental and oral health is positive and significant. Social conditions influence the role, whether from outside or inside and is stable (Berman et al., 2008). The position is a concept for what a person can do in society as an organization; a role can also be an essential treatment of society's social structure (Soekanto, 2017). The role of government, such as increasing health value, requires contributions from the community because that role's success is due to participation. The higher the participation, the higher the win, and vice versa. This study's findings are in line with conclusions (Heningtyas, 2014) that the government's role has a positive and significant impact on the implementation of service provision, including the public health sector. Also, Wiris Andespi (2016) also found that the role has a vital role in health development, not only in the curative aspect but more on prevention.

6. Conclusions
Based on the findings and discussion of this research regarding government role, health workers on community behavior and its impact on dental and oral health in the Durikumba Public Health Center, Karossa District, Central Mamuju Regency, it can be concluded that the government's variable role has a value among the variables that are indicators of this study. The highest significance is related to the variable of community behavior, oral health, and the relationship through intervening variables (community behavior) in the Lara Public Health Center Work Area, Karossa District, Middle Mamuju. On the other hand, variables with nominal values are shown in health educators' influence, both with community behavior, oral health, and the relationship through intervening variables (community behavior) in the Lara Public Health Center Work Area Karossa District, Middle Mamuju. Thus, the government's role has a more significant influence on public behavior and oral health because it is considered the dependent variable that directly and indirectly affects. Meanwhile, health educators' variable needs to be improved with the ability of extension workers to encourage and convince the public and the world of health at large.

References

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