

Original Research

FAMILY CLEAN AND HEALTHY LIVING BEHAVIOR AND ITS DETERMINANT FACTORS IN THE VILLAGE OF LABUNIA, REGENCY OF MUNA, SOUTHEAST SULAWESI PROVINCE OF INDONESIA

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Accepted: 18 March 2018

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ABSTRACT

Background: The campaign of a clean and healthy living behavior (PHBS) in Indonesia continues to be conducted to improve the public health. During five years of monitoring (2012-2015) the highest PHBS rate in Southeast Sulawesi reached only 49.75% in 2013. While PHBS data in Labunia Village of Muna Regency reached only 7.71% in 2015.

Objective: This study aims to determine the factors associated with the clean and healthy living behavior (PHBS) of family in the Village of Labunia, regency of Muna, Southeast Sulawesi province of Indonesia.

Methods: This was observational analytics with cross-sectional design study. The populations of the study were all household heads who lived in Labunia Village which were 293 households and 75 samples were selected using simple random sampling. Data were analyzed using chi-square test.

Result: Of the total of respondents, 36% of family implemented PHBS and 64% of them did not implement PHBS. There were 16% of respondents had good knowledge, 48% of good attitude, and 45.3% of good actions in PHBS. Chi square test results obtained a significant correlation between knowledge, attitude and action in PHBS with $p = 0.00 (<0.05)$.

Conclusion: There was a moderate correlation between knowledge, attitudes and actions towards the family clean and healthy living behavior in the Village of Labunia, regency of Muna, Southeast Sulawesi province of Indonesia.

Keywords: Knowledge, Attitude, Action, PHBS

INTRODUCTION

Southeast Asia is the most convenient place for infectious diseases to emerge, including those with potential pandemics. Newly emerging infectious diseases has put pressure on public health and economics. The reason why Southeast Asia is exposed by infectious diseases is complex ([Coker, Hunter, Rudge, Liverani, & Hanvoravongchai, 2011](#); [Jayadipraja, Daud, & Assegaf, 2016a](#)).

For example, the Republic of Indonesia, the country is a home to a dynamic system in which biological, social, ecological, and technological processes are interconnected in ways that allow microbes to exploit new ecological niches. This processes includes population growth and movement, urbanization, changes in food production, industry, agriculture and land use, water and sanitation, and health system impacts through

the eradication of drug resistance ([Coker, Hunter, Rudge, Liverani, & Hanvoravongchai, 2011](#); [Jayadipraja, Daud, & Assegaf, 2016a](#)).

Various regions in Indonesia are currently facing health problems which are the high rates of infectious diseases and also increasing of degenerative diseases ([Kosen & Gunawan, 1996](#); [Wahjono, 2007](#)). Environment is one of the factor that has a role to the prevalence of infectious diseases as well as degenerative ([Ma'Rufi, Keman, & Notobroto, 2005](#)) ([Jayadipraja, Daud, & Assegaf, 2016b](#)). Poor environmental conditions, poor clean and healthy behavior in the community are suspected to be the cause of the problem ([Timisela & Prabandari, 2007](#)).

Implementation of the Clean and Healthy Living Behavior (PHBS) program that has been proclaimed by the government, still encounters many obstacles in various regions, one of them is in several Regency in Southeast Sulawesi Province. The average data of PHBS number in Southeast Sulawesi is in the range of 44.75% -49.75% (2013-2015). That PHBS number is still far from the target coverage that set at 85%. While PHBS data in Labunia Village of Muna Regeny is in the range of 5.69% -7.71% (2014-2016) ([Tenggara, 2016](#)).

Low coverage of PHBS in the household order is caused by the lack of community knowledge about PHBS, low housing sanitation facilities, and lack of counseling provided by health workers, especially health promotion officers, thus affecting the behavior of community that less concerned with environmental health so it can have an impact on the life of the household ([Carter-Pokras & Baquet, 2002](#); [Sholihah & Anwar, 2014](#)). Many cases of community morbidity and mortality are caused by the low level of resident knowledge. The knowledge level of a person provides input in applying health information that has been received, both from the mass media and health workers, which impact on attitudes that will make it into a person's actions in a clean and healthy life ([Susanto, Sulistyorini, Wuryaningsih, & Bahtiar, 2016](#); [Weston & Bollier, 2013](#)).

METHODS

Study design

The type of this research was an observational analytic study, with cross-sectional of the study design. This study was conducted in the Village of Labunia, regency of Muna, Southeast Sulawesi province of Indonesia from June 2016 to August 2016.

Research subjects

The populations were all head of family who live in the Labunia Village, South Wakorumba District, Muna Regency, which counted 293 household. Sample was the examined object and considered to represent the entire population. The sample size of this study was determined by using the minimum sample size formula of Slovin, 75 respondents. The sampling technique of this research was conducted by sampling proportional with the draw procedure in each hamlet. That was 44 households from community I, and 31 households from community II.

Instrument

The indicator of PHBS of family is a measuring instrument or a guide that limits the focus of attention to assess family health situation or problem. PHBS in the household is an effort to empower family members to know, willing and able to implement clean and healthy living behavior and play an active role in the health movement in the community. PHBS households are households that performing the following 10 indicators such as: childbirth assisted by health personnel, infant exclusive breastfeeding, weighing the infants and toddlers every month, consuming clean water, hand-washing with clean water and soap, using healthy toilet, eradicating mosquito larvae at home, eating fruits and vegetables every day, doing physical activity every day, and not smoking inside the house ([Kesehatan, 2015](#)).

Ethical consideration

The ethical approval was obtained from the Department of Health of Southeast Sulawesi, and study permission was obtained from the Health Centre of South Wakorumba, Muna

regency. The researchers have confirmed that all respondents have obtained an appropriate informed consent.

Data analysis

The mean and frequency distribution were described. The Clean and Healthy Living Behavior (PHBS) of Family and its determinant factors were analyzed using Chi-square.

RESULTS

Distribution of respondents basen on knowledge as shown in the Table 1 shows that from 75 respondents, there were 34

respondents (45.3%) had less knowledge and 12 respondents (16.0%) had good knowledge. It also shows that there were 36 respondents (48.0%) had sufficient attitude and 39 respondents (52.0%) had low attitude. From action category, it shows that 34 respondents (45.3%) had sufficient action and 41 respondents (54.7%) had less action. It is also known that 27 respondents (36.0%) implemented PHBS and 48 respondents (64.0%) did not implement PHBS. However, Table 2 shows that there were significant correlations between knowledge, attitude and action with the implementation of Family PHBS with p-value 0.000 (<0.05) in all variables.

Table 1 Distribution of respondents based on knowledge, attitude and action in Labunia Village of South Wakorumba District, Muna Regency in 2017

| Variable | Community | | n (Sample) | % |
|--------------------|-------------|--------------|------------|------|
| | Community I | Community II | | |
| Knowledge | | | | |
| Good | 8 | 4 | 12 | 16 |
| Sufficient | 17 | 12 | 29 | 38.7 |
| Low | 19 | 15 | 34 | 45.3 |
| Attitude | | | | |
| Sufficient | 24 | 12 | 36 | 48 |
| Low | 20 | 19 | 39 | 52 |
| Action | | | | |
| Sufficient | 23 | 11 | 34 | 45.3 |
| Low | 21 | 20 | 41 | 54.7 |
| Family PHBS | | | | |
| Implemented | 23 | 4 | 27 | 36 |
| Not implemented | 21 | 27 | 48 | 64 |
| Total | 44 | 31 | 75 | |

Table 2 Relationships of knowledge, attitude, action and Family PHBS in Labunia Village of South Wakorumba District, Muna Regency in 2017

| Variable | Family PHBS | | | | Total | | Statistic Test |
|------------------|-------------|-------|-----------------|-------|-------|-----|--------------------------|
| | Implemented | | Not Implemented | | n | % | |
| | n | % | n | % | | | |
| Knowlegde | | | | | | | |
| Good | 9 | 75.00 | 3 | 25.00 | 12 | 100 | X ² hit=25.93 |
| Sufficient | 16 | 55.17 | 13 | 44.83 | 29 | 100 | X ² tab=5.99 |
| Low | 2 | 5.88 | 32 | 94.12 | 34 | 100 | p = 0.000 ø = 0.588 |

| Variable | Family PHBS | | | | Total | | Statistic Test |
|-----------------|-------------|-------|-----------------|-------|-------|-----|-------------------------------|
| | Implemented | | Not Implemented | | | | |
| | n | % | n | % | n | % | |
| Attitude | | | | | | | $X^2_{hit}=18.94$ |
| Sufficient | 22 | 61.11 | 14 | 38.89 | 36 | 100 | $X^2_{tab}=3.841$ |
| Low | 5 | 12.82 | 34 | 87.18 | 39 | 100 | $p = 0.000$ $\phi = 0.503$ |
| Action | | | | | | | $X^2_{hit}=22.24$ |
| Sufficient | 22 | 64.71 | 12 | 35.29 | 34 | 100 | $X^2_{tab}=3.841$ |
| Low | 5 | 12.20 | 36 | 87.80 | 41 | 100 | $p = 0.000$ $\phi = 0.545$ |
| Total | 27 | 36.00 | 48 | 64.00 | 75 | 100 | |

DISCUSSION

The clean and healthy living behavior (PHBS) is one of the efforts to change community behavior in order to support the improvement of health status, which is done through the PHBS coaching program. This program has been held by the Ministry of Health since 1996. Although the PHBS development program has been proceed for a long time and the government continues to socialize about PHBS but the achievement numbers are still minimal. There are 10 indicators of PHBS, such as childbirth assisted by health personnel, infant exclusive breastfeeding, weighing the infants and toddlers every month, consuming clean water, hand-washing with clean water and soap, using healthy toilet, eradicating mosquito larvae at home, eating fruits and vegetables every day, doing physical activity every day, and not smoking inside the house (Rice, 2006; Susanto et al., 2016).

From the results of this research showed that the lack of respondents' knowledge about PHBS became one of the causes of low PHBS coverage in the study area. Based on the results of the interview, 79% of respondents did not know the harm caused by smoking, 65% of respondents did not know the benefits of hand washing using soap and clean water, 59% of respondents did not know the disease caused by not using clean water, 58% of respondents did not know healthy toilet requirement, 54% of respondents did not know about the importance of maternity with health personnel

and 54% of respondents did not know indicators or conditions of the healthy toddler. Lack of respondents' knowledge influenced by various factors such as age and education of respondents, 52.0% of respondents are ≥ 40 years and 48.0% of respondents are < 40 years old. Meanwhile, according to the level of education obtained 32.0% graduated from high school and 13.3% graduated from university. A person's knowledge is influenced by age and education.

PHBS is a behavior that practiced by every individual with self-awareness to improve the health and play an active role in creating a healthy environment. Regulation of the Minister of Health No. 2269/Menkes/PER/XI/2011 about Guidance on the Development of Clean and Healthy Behavior (PHBS) states that Clean and Healthy Behavior (PHBS) is a set of behaviors that practiced based on awareness as a result of learning, which individuals, families, groups or communities are able to help themselves (independently) in the field of health and play an active role in realizing public health. Education is the basis for determining the comprehension and reasoning power, and determining the thinking horizon for a person to analyze any changes that exist and affect the reasoning power of a person so that in the end will know something that is not yet known and will be motivated to do it after understanding the purpose and objective (Notoadmodjo, 2012; Rorimpandey, Rattu, & Tumuraang, 2015).

The results also showed that from 12 respondents who had good knowledge, there were 75% of respondents implemented PHBS household and 25% of respondents did not implement PHBS. This case showed that the role of sufficient knowledge does not necessarily change a person's actions towards the implementation of PHBS in the household. One of the factors that could inhibit implementation of PHBS in household is the less income because by only that kind of earnings respondents are not able to build a family toilet that meets health requirements. This thing is influenced by the business of the respondents in doing the job that is 10.7% of civil servants, 9.3% of honorer, 9.3% of entrepreneur, 13.3% of fishermen and 33.3% of farmers, therefore though the respondents have adequate knowledge but still they cannot apply it in everyday life.

The results of statistical tests showed that there is a moderate connection between knowledge with Family PHBS in Labunia Village South Wakorumba District Muna Regency. This research is in line with research conducted by previous study showed that there was a connection between knowledge of respondents with PHBS family health. The more experience and information one gets, the more one knows ([Carolina, Carolina, & Lestari, 2016](#)).

In terms of attitude in PHBS, the results showed that the public attitudes were still low in PHBS. Low of respondent attitude is because based on the questionnaire results there were 52% of respondents did not agree to consume vegetables and fruits every day because it did not affect the health, 51% of respondents agree to work all day to keep the body healthy, 51% of respondents did not agree to eradicate mosquito nests, 51% of respondents did not agree to wash hands before meals, 44% of respondents agreed to smoke inside the house and 41% of respondents agreed that drinking water is water that directly drank. Furthermore, low respondents' attitude is influenced by the low knowledge of the respondents, where the lower the knowledge of a person, so the attitude would not be good,

and vice versa, with good knowledge, the attitude of respondents will be better especially in the application of Family PHBS but some other factors can be the cause for good or not a person's attitude.

This study showed that from 36 respondents who had sufficient attitude, there were 61.1% of respondents implemented PHBS and 38.9% of respondents did not implement PHBS. This is caused by the behavior addressed by respondent did not reflect PHBS such as the utilization of family toilet, smoking habit, although the respondent showed good attitude not necessarily realized in the real action. A positive attitude does not necessarily change people's behavior. Respondents who have sufficient attitudes can be influenced by the ability to explain about the PHBs that obtained so that by itself it will be easier to understand and easier to explain about PHBS ([Jayanti, Effendi, & Sukandar, 2011](#); [Notoadmodjo, 2012](#)).

The results of statistical tests show that there was a moderate connection between attitude with Family PHBS. This research was at once in line and strengthens research conducted by Rayhana and Hendri Hadiyanto's study that there was a connection between attitude and PHBS family health ([Hadiyanto, 2016](#); [Rayhana & Triana, 2017](#)). The result of research based on interview result showed that the low of respondents' actions is caused by 41% of respondents who occasionally washed their hands with soap and clean water before and after the bathroom, 40% of respondents sometimes used clean water, 40% of respondents sometimes drained their tubs or water reservoirs and rarely given mosquito larvae remedy (abate), 39% of respondents had family members who always smoke in the house, and 37% of respondents had families who sometimes consume vegetables and fruits.

CONCLUSION

From the results of this study, it is concluded that there were significant correlations between knowledge, attitude and action with the

implementation of Family PHBS with p-value 0.000 (<0.05) in all variables. It is clear that the implementation of PHBS in the community should be followed by the enhancement of knowledge about health especially PHBS and the enhancement of decent income/revenue. If the two factors are unrealized then it's very difficult that indicators in PHBS will be achieved. So, the process of changing the community behavior should be in line with the health development program consistent by PHBS indicator, it will need long time and big effort in the coaching, counseling and empowerment of the community, and then it requires participation and cross-sector involvement as well as those who can provide role model within society. Theoretically, in a community group, we recognize the behavior called Fathernalistik (The tendency to follow the respected or elderly in a certain village/region) so that the involvement of religious figures and community figures is needed.

Acknowledgment

The authors would like to thank to the Head Office of the South Wakorumba Health Centre, Muna and staff for their assistance in providing data and clarifying the information obtained so that research can be completed. The authors also would like to thank all the persons who have helped a lot that cannot be mentioned one by one.

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Cite this article as: Jayadipraja, E.A., Prasetya, F., Azlimin., Mando, W.O.S.Y. (2018). Family clean and healthy living behavior and its determinant factors in the Village of Labunia, Regency of Muna, Southeast Sulawesi Province of Indonesia. *Public Health of Indonesia*, 4(1):39-45.