



## KNOWLEDGE OF CLEAN AND HEALTHY LIFE BEHAVIOR WITH TRACOMA PREVENTION MEASURES IN THE ELDERLY

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### ABSTRACT

**Background:** The problem of a person's lack of knowledge about eye diseases can cause a lack of understanding in the community. Elderly who live with their families do not know how to live a clean and healthy life. Implementation of clean and healthy living behavior in the household order by the community is still below standard. The aims to analyze knowledge of clean and healthy living behavior with trachoma disease prevention measures in the elderly. **Methods:** The research design used cross-sectional, namely measuring knowledge of clean and healthy living behavior towards prevention of trachoma in the elderly. Sample research, namely elderly who are still healthy who are in the working area of the Patrang Public Health Center as many as 52 respondents. Through a purposive sampling technique with inclusion criteria including: 1) elderly aged 50-85 years and carried out screening using the MMSE questionnaire; 2) can communicate well and smoothly; 3) cooperative elderly; 4) willing to be a respondent. Researchs data obtained from the results of filling out questionnaires by respondents. Then the data is tested for analysis Rank Spearman's correlation using the SPSS statistic with a p value <0.05. **Results:** The research results show the knowledge of clean and healthy living behavior is mostly in the sufficient category as many as 26 respondents (50%). Trachoma disease prevention measures in the elderly are mostly in the good category as many as 33respondents (63%). There is a relationship between knowledge of clean and healthy living behavior and prevention of trachoma in the elderly, with a p = value 0.001, and value r = 0.543 means that it has a positive or unidirectional relationship with moderate correlation strength. **Conclusions:** Knowledges of clean and healthy living behavior can shape a person's actions or behavior for the better. Knowledge of clean and healthy living behavior can be learned and or can be obtained through information from various sources and methods (print or electronic form). So that can take preventive measures against trachoma in the elderly.

**Keywords:** Knowledge of clean and healthy living behavior, Preventive measures, Trachoma

### INTRODUCTION

Issues regarding one's knowledge of available eye care services, attitudes towards eye care and services and seeking appropriate eye surgery practices in the community have an important role. The problem of someone's lack of knowledge

about eye disease can lead to a lack of understanding in society (Favacho, 2018). Elderly who live with their families do not know how to live a clean and healthy life (Kemenkes RI, 2012). The implementation of clean and healthy living behaviors in the household setting by the community is still



below standard (Ministry of Health Republic of Indonesia, 2013).

The results of research in Indonesia that as many as 499The elderly do not know how to live a clean and healthy lifestyle. A total of 30 thousand in 440 districts in Indonesia have poor sanitation. Clean and healthy living behavior reached 38.7%. In 2010 the coverage of clean and healthy living behavior was still below the 70% target (Ministry of Health RI, 2012). The results of research in Indonesia found that as many as 70% of the community was still low in carrying out clean and healthy living behaviors (Kemenkes RI, 2013). The results of research in Indonesia show that 45.3% of respondents have good CHLB (Nasiatin et al., 2021). The results of research in Bitung show that the level knowledge of clean and healthy living behavior most of them are good, namely as many as 52 people (37.3%) and attitude most of them are good as many as 42 people (50.6%) (Rotten, 2018). WHO data states that trachoma causes 15% of blindness. In Asia, trachoma reaches 5.6 million people with blindness and active trachoma requiring treatment (WHO, 2017). In Indonesia sufferers of trachoma disease as much as 0.2%. The results of a survey of the Indonesian population experiencing blindness by the Indonesian Ministry of Health in 2015 with the method Rapid Assessment of Avoidable Blindness (RAAB) shows that East Java ranks third with 4.5% experiencing blindness. Data from the Jember District Health Office in 2018 there were 111 people visiting the Working Area of the Patrang Public Health Center and as many as 39 cases of trachoma were the elderly.

Factors causing knowledge of clean and healthy living behavior towards prevention of trachoma disease in the elderly are still low, namely the elderly do not get formal education (Ministry of Health, Republic of Indonesia, 2010); cleanliness of elderly individuals is the main factor causing trachoma, but this

knowledge about hygiene cannot be done alone when they are elderly; the elderly are more likely to experience cognitive decline so this also affects how to maintain daily hygiene; the dependency level of the elderly is quite high in terms of hygiene needs; The elderly are very susceptible to trachoma because the elderly are not cared for by family members who think that the elderly already know how to take care of themselves even though personal hygiene is sometimes neglected, so that this disease spreads through direct contact with eye discharge secretions transmitted through daily necessities such as towels, clothing, infected flies, poor sanitation, clean water, toilet inadequate, beauty tools and others (Lukitasari, 2011); the elderly do not wash their hands properly so that they get sick due to infection (Kustantya, 2013).

One of the efforts that can be made to increase knowledge of clean and healthy living behaviors regarding prevention of trachoma in the elderly is by providing health promotion aimed at increasing knowledge, attitudes, and practices of trachoma prevention in the community (Lange et al., 2017).

## METHODS

The design of this study used cross-sectional, namely to measure knowledge of clean and healthy living behavior towards prevention of trachoma in the elderly.

The population of this study is the elderly who are still healthy who are in the working area of the Patrang Health Center as many as 111 patients. Through a purposive sampling technique, a sample of 52 respondents was obtained with inclusion criteria including: 1) elderly aged 50-85 years and carried out screening using the MMSE questionnaire; 2) can communicate well and smoothly; 3) cooperative elderly; 4) willing to be a respondent.

Research data obtained from the results of filling out questionnaires by



respondents. Then the data is tested for analysis Rank Spearman's correlation using the SPSS statistic with a p value <0.05.

This research has fulfilled the ethical test submitted to the Jember University Faculty of Dentistry with No. 457/UN25.8/KEPK/DL/2019.

## RESULTS

### Characteristics of Respondents

Table 1. Frequency Distribution of Respondent Characteristics by Age, Gender, Education and Occupation.

Characteristics of Respondents	f	%
<b>Age:</b>		
Early elderly 46-55 years	16	31
Late elderly 56-65 years	14	27
Seniors >65 years	22	42
<b>Gender:</b>		
Man	11	21
Woman	41	79
<b>Level of education:</b>		
No school	14	27
Elementary school equivalent	12	23
Middle school equivalent	12	23
High school equivalent	8	15
College	6	12
<b>Type of work:</b>		
No work	24	46
Farmers/farm workers	3	6
Civil servants/pensioners	7	13
Self-employed	15	29
Housewife	3	6

Table 1 shows that most of the respondent data by age are > 65 years old as many as 22 people (42%). Most of the sexes were women as many as 41 people (79%). Most of the respondents' education level was not going to school, as many as 14 people (27%). The type of work most of the respondents did was not work as many as 24 people (46%).

### Knowledge of Clean and Healthy Behavior

Table 2. Knowledge of Clean and Healthy Behavior

Knowledge	f	%
Less	2	4
Enough	26	50
Good	24	46

Table 2 shows that the respondent's data regarding knowledge of clean and healthy living behavior is mostly in the sufficient category, 26 people (50%).

### Precautions for Trachoma Disease in the Elderly

Table 3. Precautions for Trachoma Disease in the Elderly.

Preventive Actions	f	%
Less	0	0
Enough	19	36,5
Good	33	63,5

Table 3 shows that the respondent's data regarding measures to prevent trachoma in the elderly are mostly in the good category, 33 people (63%).

### Relationship Between Knowledge and Prevention of Trachoma in the Elderly

Table 4. Relationship Between Knowledge and Prevention of Trachoma in the Elderly.

Variable	p value	r
Knowledge level	0,001	0,543
Preventive Actions		

Table 4 shows that the results of the analysis of the relationship between knowledge of clean and healthy living behavior and prevention of trachoma in the elderly get a value of  $p = 0.001$ , meaning that there is a relationship between knowledge of clean and healthy behavior and prevention of trachoma in the elderly, with a value of  $r = 0.543$ , meaning that there is a relationship positive or in the same direction with moderate correlation strength.



## DISCUSSION

### Knowledge of Clean and Healthy Behavior

The results of this study showed that the knowledge of clean and healthy living behavior was mostly in the sufficient category, with 26 people (50%).

Clean and healthy living behavior are all behaviors that are carried out consciously, so that family members or families can help themselves in the health sector and play an active role in health activities in the community (Kustantya, 2013). Clean and healthy living behavior is a behavior that results from learning and is practiced voluntarily to realize the highest degree of health (Bawole et al., 2018).

The habit of clean and healthy living behavior in a person can be influenced by various factors, including exposure to health promotion media, the role of parents. The availability of facilities and infrastructure is a driving factor for behavior change (Nasiatin et al., 2021).

Individuals are highly sensitive to changes in behavior and can act as health promoters for society. The habit of living clean and healthy from an early age will result in changes in behavior that tend to settle down (Ministry of Health, 2008). Individuals are agents of change and are a group of elderly who are very vulnerable to disease transmission, especially those transmitted through poor hygiene behavior (Salasa et al., 2013).

The use of media as a channel for conveying health messages and facilitating message reception by the public or clients (Notoatmodjo, 2012) can be in print or electronic form. It is important that the PHBS media used to promote health must use language that is simple, concise, easy to understand, and attractive to the reader or audience. Based on the results of other studies, the majority of respondents (89.4%) stated that they had received clean and healthy living behavior health promotion. The percentage of respondents

who were exposed to clean and healthy living behavior media and showed good behavior was higher than respondents who showed bad behavior and similarly had never been exposed to clean and healthy living behavior media (Nasiatin et al., 2021). The results of another study showed that respondents who were not exposed had a five times higher risk of experiencing clean and healthy living behavior than respondents who were exposed. The results of other studies state that printed media (such as clean and healthy living behavior pocket books) are effective in increasing knowledge, attitudes, and intentions towards clean and healthy living behavior (Hanif et al., 2019). Individuals get information about clean and healthy living behavior from various sources media such as newspapers, television, radio, books and magazines, and friends. So it is very important to increase the availability of health promotion media related to clean and healthy living behavior (Nasiatin et al., 2021).

Health socialization can be an alternative delivery of health messages. It has been proven effective in increasing knowledge that outreach activities have a real impact on improving the quality of life (Rohima & Marthia, 2018). The role of the individual is providing health information and outreach, teaching, planning, and making referrals. The results of other studies show that individuals who do not carry out their roles can have a four times higher risk of experiencing poor clean and healthy living behavior compared to individuals who carry out their roles well (Lestari, 2018).

### Trachoma Disease Prevention Measures in the Elderly

Prevention is an action taken before the event occurs so that the event can be avoided. Disease prevention measures are actions aimed at preventing, delaying, reducing, eradicating and eliminating



disease. Preventive action is a combination of several multidimensional aspects such as physical health, psychological state, level of independence, social relationships, personal beliefs and environment. Preventive action is an analysis concept of an individual's ability to measure the goodness of various aspects of individual life (Theofilio, 2013). A high degree of health can be obtained if everyone has behavior that pays attention to health (Maryuni, 2013).

One's knowledge of available eye care services, attitudes towards eye care and services and seeking appropriate eye surgery practices in the community have an important role to play. Someone's lack of knowledge about eye disease can lead to a lack of knowledge in society (Favacho, 2018). Educational factors can affect the level of knowledge, the higher a person's education, the higher the level of prevention of disease as well, so that the quality of life is better because individuals understand the disease and preventative measures are taken to treat trachoma properly (Chaidir, 2016).

An unhealthy lifestyle has an impact on decreasing body resistance, a common problem experienced is susceptibility to disease. Health problems in the family are interrelated, if one family member is sick it will affect other family members.

Trachoma is caused by bacteria *Chlamydia trachomata* through the factor of flies as carriers of the bacteria from people who have been infected (WHO, 2017). An environment that lacks effective sanitation and an adequate supply of clean water promotes rapid transmission of infection. The results of the study show that there is a relationship between the use of antibiotics, the environment, and washing your face with the prevention of disease (Ngodi, 2008).

### **Relationship between Knowledge of Clean and Healthy Living Behavior and Prevention of Trachoma in the Elderly**

The incidence rate of behavior-based disease can be related to various factors, including the availability of health promotion media in the community, and the role of the community (Lina, 2016). Health promotion is the most effective way of health promotion and education considering that individuals are agents of change who are very sensitive to all forms of change. The results showed that as many as 45.3% of respondents indicated poor clean and healthy living behavior, while 54.7% had good clean and healthy living behavior. This is consistent with the findings of previous studies which showed an almost balanced proportion of good clean and healthy living behavior and bad clean and healthy living behavior (Bawole et al., 2018). There are several PHBS indicators in the environment that do not meet the requirements. The highest percentage of bad clean and healthy living behavior was found in the behavior of defecating and urinating. The results of previous research, where the indicators of hand washing behavior were categorized as sufficient, and the indicators of not littering were categorized as bad (Messakh et al., 2019).

Knowledge is a very important domain for the formation of one's actions or behavior. If knowledge has a specific target, has a method or approach to study the object so as to obtain results that can be systematically arranged and universally recognized, then a scientific discipline is formed (Notoadmodjo, 2003). The results of other studies show that the better the level of knowledge, the better the prevention behavior, even with different diseases. Respondents with good knowledge will have a supportive attitude and can apply good behavior. Lack of knowledge can result in no conscious efforts to implement clean and healthy



living behaviors, namely prevention efforts (Saputro, 2013).

Behavior is a person's response to stimuli related to illness and disease, this response can be active and passive, namely real action (Indrasto, 2017). Everyone has a different way of dealing with a problem in him. Hand hygiene by washing hands in the 6 correct steps, washing your face every time you do activities outside the home using soap, running and clean water, maintaining a healthy environment and latrines are the main factors in preventing trachoma. The results of other studies state that if you do not wash your hands with soap you can transmit infection to yourself against viruses and bacteria when touching the nose, eyes and mouth (Risnawaty, 2017). Apart from that, it can also transmit bacteria to other people (Ahmad, 2018). When the hands are clean and healthy, and maybe accidentally cleaning the face or wiping sweat, it can minimize the causes of trachoma (Abdurrauf, 2016). The results of other studies state that there is a close relationship between knowledge in an effort to improve behavior (Sari, 2006). The results of other studies state that the lack of sources of information obtained by individuals can lead to a lack of information from other people in carrying out one's personal hygiene. Providing information earlier and from various trusted sources can influence a person's behavior. So that other sources of health workers have an important role as a source of information so as to provide information as clear as possible about a knowledge. The more sources of information, the better the information obtained by a person is also supported by the media used which can also influence a person's attitude (Rahman, 2014). Experience is a way for someone to get the truth of knowledge. The past becomes one of the knowledges as a consideration in solving the same problem (Hapsari & Isgiantoro, 2014). The results of other studies state that the knowledge obtained

can provide awareness and will eventually cause people to behave according to their knowledge (Putra, 2019).

## CONCLUSION

Knowledge of life behavior clean and healthy can build of action or behavior someone gets better. Knowledge of clean and healthy living behavior can be learned and or can be obtained through information from various sources and methods (print or electronic form). So that can do prevention of trachoma in the elderly.

Knowledge clean and healthy living behavior in the elderly should be given continuously and continuously so that the elderly always remembers and become accustomed to their activities.

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