

OVERVIEW OF KNOWLEDGE ON THE USE OF BLOOD SHELLS (*Anadara granosa*) AS ALTERNATIVE MEDICINE IN THE COMMUNITY OF SOUTH MAMBLU, SOUTH BUTON REGENCY

Rahma Wanda ^{1*}, Suparman supardi ^{2*} Ratih nurwanti ^{3*}

^{1,2,3}Politeknik Baubau, Kota Baubau Sulawesi Tenggara

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CORRESPONDING AUTHOR

Nama : Suparman Supardi

Address: Politeknik Baubau, Jl. Lakarambau, Lipu,
Kec. Betoambari, Kota Baubau, Sulawesi Tenggara,
Indonesia.

E-mail : suparmansupardi04@gmail.com

A B S T R A C T

Background Blood Cockle (*Anadara granosa*) is a marine biota that is not only used as a food source but also holds potential as an alternative treatment, particularly for anemia. **Objectiv** This study aims to describe the knowledge of the community in mambulu selatan, south Buton Regency, regarding the use of blood cockles as at traditional medicine. **Method** The research employed a descriptive quantitative method with purposive sampling involving 76 responden. Data were collected using questionnaires and analyzed using univariate descriptive statistics. **Results** The results showed that the majority of respondents had a moderate level of knowledge (76,32%), while 17.11% had low knowledge, and only 6,58% demonstrated high knowledge. Respondents were mostly female (56,58%), aged 17-25 years (50%), and had at least a senior high school education (68,42%). Further analysis indicated that gender, age, and education level did not significantly influence the level of knowledge. These findings highlight the importance of systematic education to help the community better understand the scientific and safe use of blood cockles. **Conclusion** The level of public knowledge regarding blood cockles as traditional medicine is mostly in the moderate category, at 76.32%, and there is no significant influence of gender on the level of knowledge.

INTRODUCTION

Coastal areas are a source of livelihood for many communities living in the surrounding areas. With the increase in population, food supplies are no longer sufficient, so people are thinking of ways to meet their food needs. Therefore, people have switched to shellfish farming, especially in coastal areas. With this farming business, the needs of the community can be met and community growth can be increased. Given the above conditions, there are many potential business opportunities based on resources such as the marine industry (Hafis & Manto, 2020).

Blood clams (*Anadara granosa*) are a type of bivalve mollusk that has the potential and economic value to be developed as a source of protein and minerals to meet the food needs of the Indonesian people (Rosnawati, 2015). The chemical composition of clams varies greatly depending on the species, sex, age, and habitat. In general, clams are rich in succinic acid, citric acid, and glycolic acid, which are closely related to taste and provide energy in the form of calories. In addition, clams also contain large amounts of the enzyme thiaminase, which can destroy vitamin B1 when consumed raw.

One community that has been utilizing blood clams is the community in the Sampolawa District. The community obtains blood clams from the nearby sea. Based on information obtained from the local community, blood clams are mostly used as food to increase stamina, and a small portion is consumed by people who are anemic. The practice of using blood clam meat to treat anemia comes from empirical experience, either by boiling or eating it raw.

Until now, the Mambulu Selatan community has not been aware that blood clams are not only a source of food, but also have the potential to be a source of medicine. Therefore, it is necessary to disseminate accurate information about this matter. Based on this, researchers are interested in studying "The Use of Galambal in the Mambulu Selatan Environment." (*Alnaldalral gralnosal*) as

an Alternative Treatment for Malaria in the Mambulu Selatalan Environment, Kalbupalten Buton Selatalan".

METHOD

Research Design

This study uses a descriptive qualitative method to determine the level of awareness of herbal medicine (*Alnaldalral gralnosal*) as an alternative treatment for manipulating valrialbel.

Research Time and Place

The study was conducted from May to August 2025 in the Mambulu Selatalan neighborhood, Salmpolalwal subdistrict, Buton Selatalan district.

Population and Sample

The population in this study consisted of residents in the Mambulu Selatalan neighborhood, Buton Selatalan District, who were selected as research subjects, with a total population of 326 people. The population was 326 people, with a sample size of 76 people determined using the Slovin formula.

Sampling technique

Non-probability sampling was used, namely purposive sampling, which is a sampling technique carried out by deliberately selecting respondents based on certain considerations. The researcher's considerations in taking these samples were as follows: Inclusion Criteria

- 1). People who have consumed herbal medicine to treat their ailments
- 2). : Individuals who are considered to be most knowledgeable about traditional medicine.
- 3). Individuals who have knowledge about traditional medicine.
- 4). Knowledge of herbal medicine.
- 5). Respondents must be at least 17 years old.

Data Collection Techniques

Data was collected through field surveys and questionnaires given to respondents who met the criteria.

Data Processing and Analysis

Data was processed using the following steps: editing, tabulation, data entry, and data cleaning. Data was analyzed univariately using descriptive statistics (frequency and percentage). The level of education was categorized as high (80–100%), medium (50–79%), and low (<49%). The Chi-Square test was used to examine the relationship between sociodemographic variables and the level of awareness with $\alpha = 0.05$.

Data Source

- Primary: Results of the questionnaire.
- Secondary: Literature, websites, and related documents.

RESULTS & DISCUSSION

This study was conducted in the Mambulu Selatalan neighborhood, Salmpolalwal subdistrict, Buton Selatalan district. This area is known to have abundant marine resources, especially sea cucumbers (*Holothuria* spp.), which are used by traditional healers as an alternative medicine, especially to treat anemia. However, the level of knowledge among the community regarding the use of seaweed has not been fully explored.

A total of 76 respondents met the inclusion and exclusion criteria and became subjects in this study. The following is the distribution of respondents based on their demographic characteristics and level of awareness.

Table 1. Sociodemographic Characteristics of Respondents (n=76)

Gender	Number (People)	Percentage
Male	33	43.42
Women	43	56.58%
Total	76	100

Table 1 shows that the respondents consisted of 76 people, of which 33 were male (43.42%) and 43 were female (56.58%).

Table 2 Distribution of Respondents Based on Age Distribution in the Southern Mambulu Community

Age	Number	Percentage
17 – 25	38	50.00

26 – 35	9	11.84
36–45	12	15.79%
46 >	17	22.37%
Total	76	100

Table 2 shows that of the 76 respondents studied, 38 respondents (50.00%) were aged 17 to 25 years, 9 respondents (11.84%) were aged 26 to 35 years, 12 respondents (15.79%) aged 36 to 45 years old, and 17 respondents (22.37%) aged 46 years old and above.

Table 3. Distribution of Respondents Based on Education Level in the Southern Mambulu Community

Education	Number	Percentage
No schooling	1	1.32
Elementary/Middle school	7	9.21
Junior High School/Sedeeraljalt	6	7.89
High School/Vocational School	52	68.42
Higher education	10	13.16
Total	76	100

Table 3 shows that of the 76 respondents studied, those with the highest level of education were high school graduates, with 52 respondents (68.42%), followed by university graduates, 10 respondents (13.16%), elementary/junior high school graduates, 6 respondents (9.21%), junior high school/high school graduates, 6 respondents (7.89%), and 1 respondent (1.32%) who did not attend school.

Table 4. Classification of the Level of Public Knowledge Regarding the Utilization of Blood Shellfish

Level of knowledge	Number	Percentage
High (80-100%)	5	6.58%
Medium (50-79%)	58	76.32
Low (<49%)	13	17.11
Total	76	100

Based on Table 4, the majority of respondents in Malmbulu Selatalan have a moderate level of knowledge (76.32%), while a small number have a high level of knowledge (6.58%).

Table 5. Relationship between Gender and Level of Knowledge

Gender * Category Percentage Crosstabulation

Characteristics		Category Percentage			Total	<i>p-value</i>
Gender		High	Medium	Low		0.150
	Male	1	25	6	32	0.150
	Women	2	25	17	44	
Total		3	50	23	76	

Table 5. The relationship between gender and the level of awareness of the importance of recognizing gender equality. The results of the analysis indicate that the majority of respondents, both men and women, have a moderate level of awareness. There were 25 male respondents with moderate levels of awareness out of a total of 32, while the number of female respondents was also 25 out of a total of 44. Meanwhile, there were only a few respondents from both genders who were classified as high. The significance value (p-value) obtained was 0.150, which is greater than $\alpha = 0.05$, meaning that there is no significant relationship between gender and level of knowledge.

Table 6. Relationship between Age and Level of Knowledge

Age * Category Percentage Crosstabulation

Category Percentage				Total	Value <i>p-value</i>
High	Medium	Low			

Age	17-25 years	1	27	11	39	
	26-35 YEARS	0	6	3	9	
	36-45 YEARS	1	7	4	12	
	OLD					0.948
	46 >	1	10	5	16	
Total		3	50	23	76	

Based on Table 6, the distribution of the level of awareness of the age group of respondents is as follows. From the results, it is known that respondents aged 17–25 years were the most involved in this study, namely 39 people, with the majority belonging to the medium education category. The other age groups (26–35 years old, 36–45 years old, and >46 years old) also showed a similar trend, with a majority in the moderate education category. However, the p-value of 0.948 indicates that there is no significant relationship between age and employment status.

Table 7. Relationship between Education Level and Employment Level

Level of Education * Category Percentage Crosstabulation		Category Percentage			Total	Value <i>p-value</i>
		High	Medium	Low		
Educational Level	Elementary	1	3	3	7	0.200
	Junior High School	1	2	3	6	
	High School	1	33	11	45	
	Vocational School	0	7	1	8	
	D3	0	2	0	2	
	Bachelor's Degree	0	3	4	7	
	NOT IN SCHOOL	0	0	1	1	
Total		3	50	23	76	

Table 7 shows the relationship between the respondents' highest level of education and their level of awareness of the importance of reading. The majority of respondents were high school graduates (68.42%) and were predominantly at an intermediate level of education. Although in theory, the higher the level of education, the higher the level of knowledge on a particular topic, in the context of this study, this was not statistically proven. The p-value of 0.200 is greater than the α value of 0.05, indicating that there is no significant relationship between the level of education and knowledge about the use of kerlang.

CONCLUSION

Conclusion

Based on the results of a study involving 76 respondents who recognize the use of kerang dalhal (*Alnaldalral gralnosal*) as an alternative medicine in the Malmbulu Selaltaln area, it can be concluded that the level of awareness of keralang dalralh as a traditional medicine is high in the Sedang category, namely 76.32%, and there is no significant influence of gender on the level of awareness. This study has several limitations that need to be considered. First, the data was collected cross-sectionally, so it does not explain the cause-and-effect relationship.

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DAFTAR PUSTAKA

Abdullah, V. I., & Halumalhu, C. . (2020). The Effect of Consuming Keralang (ALnaldalral Gralnosal) on Changes in Hemoglobin Levels in Women of Childbearing Age. *Journal of Holistic Nursing Science*, 7 (2), 169–179. <https://doi.org/10.31603/nursing.v7i2.3126>

- , M., Meye, E. D., & Kalmalsi, Y. (2018). Analysis of Bivalves Content Consumed in the Coalstalls of Alrubalral, Ende. *Jurnall Biotropikall Salins*, 15 (3), 38–48. <https://ejurnall.undaln.alc.id/index.php/biotropikall/issue/view/no3>
- Hunowu. (2019). Socialization of the Internet as a HealthyIntelligent, Creative, and Productive Medium for Balru. *Valid Journal of Communication Studies*, 1(3), 1–10.
- Ilhalmudin, M. (2019). THE EFFECT OF MANGROVE DENSITY ON THE GROWTH AND SURVIVAL OF MANGROVE SEEDLINGS (). *Journal of Natural Resources Management*, 9 (1
- Meilinal, & Innocentius Bernalrto. (2021). The Influence of Education, Attitude, and Competence on Patient Satisfaction. *Journal of Business Administration (JALB)*, 11(1), 1–6.
- Munalwalroh, S., & Widyastuti, S. (2019). REMOVAL OF IRON (Fe) USING CALNGKALNG KERALNG DALRALH ADSORBENT ALnaldalral gralnosal Linn). *WALKTU: UNIPAL Engineering Journal*, 17 (236456/walktu.v17i2.2131
- Puspitalsalri, AL., ALdi, P., & Rubali, D. F. (2018). *Dallalm Reminerallisalsi Gigi Sulung*. 1(1), 42–46.
- Rumondalng, Utalmi, D., & Riyaldi, D. (2024). Growth and Developmentof Bivallvial in the District of Baltu Balral, North Sumatra. *Journal of Research*, 12(1), 113–118.
- Salri, M. S., & Zefri, M. (2019). The Influence of Aluntalbilitals, Pengetalhualn, and Pengallalmaln Pegalwali Negeri Sipil Besertal Kelompok Malsyalralkalt (Pokmals) Terhaldalp Kuallitals Pengelolal Dalnal Keluralhualn in the Lalngkalpural Subdistrict Environment. *Jurnall Ekonomi*, 21(3), 311.
- Sudalrmalwaln, W. S., Suprijalnto, J., & Rinialtsih, I. (2020). The use of Calangkalng Keralang Analdalral gralnosal, Linnaleus 1758 (Bivallvial: Arcidale) as a natural adsin wastewater. *Journal of Marine Research*, 9 (3
- Suryono, C. AL., Rochalddi, B., Kelalutahn, J. I., Perikalnaln, F., Diponegoro, U., Soedalrto, J. P., Kalmplus, S. H., & Temballalng, U. (2015). *Keralng dalralh* 3. 18(1), 28–32.
- Utalmi, L. S., & Musyalrofalh, S. (2021). Analysis of the Impact of the COVID-19 Pandemic on the Health Status of in the Village of Almpel Malghfur in Terms of Nutritional Balance, Healthand *Permals Scientific Journal: STIKES Kendall Scientific Journal*, 11(1), 1–8.
- Wisnu S. S, Jusup S, Ital R 2020. *Analysis of the General Properties* of, innaleus 1758 (Bivalvia: Arcidale) as a Natural Adsorbent in Water. Diponegoro University Vol 9, No.3.
- Ralhmalnialh 2018. SYNTHESIS AND CHARACTERIZATION OF HYDROXYALPATITE FROM CALNGKALNG KERALNG DALRALH (ALnaldalral gralnosal) AS A BALHALN BALKU SEMEN TALMBALL GIGI. Department of Physics, UIN Al-Halluddin Makassar.
- Siti Mdaln Sri W. 2019. IRON (Fe) LOGALM PENJERALPALN USING CALNGKALNG KERALNG DALRALH (ALnaldalral gralnosal Linn) ADSORBENTSPGRI ALdi Bualnal Suralbalyal . Volume 17 Number 02.
- Veral I, C.H.Halumalhu 2020. The Effect of Consuming Dalral (Dalral Gralnosal) on Changes in Hemoglobin Levels in Women of Childbearing Age. Ministry of Health Polytechnic. Vol. 7 No. 2.
- Chrisnal AL, Irwalni, and Balskoro R. 2015. Prospects for Keralng Dalralh (ALnaldalral gralnosal) Cultivation to Increase Productivity Tugu SemalralngUNDIP TemballalngSemalralng. Vol. 18(1):28–32.
- Almbalr P, Prasetyo AL, Devinta F. March 2018. The Effect of Mangrove (Alnaldalral gralnosal) on Primary Tooth Remineralization. Brawijaya University.
- Muhalmmald I, Sitti H, Baliq H. 2019. THE EFFECT OF THE LEVEL OF MALANGROVE DEFORESTATIONON THE GROWTH SURVIVAL OF MALANGROVEALnaldalral gralnosal). , NTB. Volume 9. No. 1: 75-85.