VOL 01 NO 01 2021
E-ISSN : 2774-6577

KLASICS

Kendari Journal of Maritim and Holistic Nursing





E-ISSN: 2774-6577

KLASICS:

Kendari Journal of Maritime and Holistic Nursing
Volume 01 Number 01 Januari 2021

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KLASICS
Kendari Journal of Maritime and Holistic Nursing
https://stikesks-kendari.e-journal.id/K
Volume 01 | Number 01 | Januari | 2021
E-ISSN : 2774-6577

The Association Of Education Level And Knowledge To The Adherence To Meningococcal Meningitis Vaccination In Umrah Pilgrims At Kendari Port Health Office

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Keywords *:*
Educational Level, Knowledge, Adherence To Meningococcal Meningitis Vaccination

Abstract Meningococcal meningitis is an acute disease of the lining of the brain caused by the bacterium Neisseria meningitides on the protective membrane that surrounds by the brain, spinal cord, which as a whole is called meninges. Meningococcal meningitis vaccination is given to people who will travel to meningitis endemic countries given at least 30 days before departure. The purpose of this research was to know the relationship between education level and knowledge with adherence to the meningitis vaccination for Umrah pilgrims at KKP Kendari. This study was an analytical descriptive using the cross-sectional study approach. The samples were 69 people. The sampling technique used a purposive sampling technique. The variables studied were adherence to meningitis vaccination, the level of education and knowledge. The analysis used chi-square test. The results showed that there was no association between education (ρ value = 0.360) and there was a relationship of knowledge (ρ value = 0.005) with adherence to the meningococcal meningitis vaccination at the KKP Kendari. The conclusion of this study is the level of education does not guarantee adherence to meningitis vaccination. It is recommended to increase counseling about the dangers of not vaccinating before the pilgrimage.

INTRODUCTION

Meningococcal meningitis is an acute disease of the lining of the brain caused by the bacterium Neisseria meningitides that occurs in a protective membrane that is veiled by the brain, the spinal cord called meninges(1). Every year the incidence of this disease increases, according to the World Health Organization (WHO), meningococcal meningitis has infected about 400 million people worldwide. Africa and Asia are the highest incidences of meningitis in the world. In 2015 a cerebrospinal meningitis outbreak with death (CFR 8%) occurred in Nigeria with a total of 652 cases (2). In Indonesia, the number of cases of meningitis that occurred in men was 12,010 patients and in women were 7,371 and patients who died were 1,025 people (2).

Meningitis transmits quickly and becomes an epidemic. Considering meningitis is the most prevalent in the country of Saudi Arabia because it is the place of carrying out the pilgrimage and Umrah, then to protect the pilgrims affected by meningitis, the Saudi Ambassador in Jakarta requires every prospective pilgrims, workers, and Umrah to get

a meningitis vaccination as a condition to get a visa (3). Meningococcal meningitis vaccination is essential to prevent bacterial or viruses causing meningitis. Meningitis vaccination is not only used to prevent meningitis but also other communicable diseases such as HIV, TBC, Ebola. Therefore, meningitis vaccination program is mandatory (4).

Kendari Port Health Office is UPD or Technical Implementation Unit and Ministry under the Director of Disease Control and Environmental Health (Dirjen PP, PL) in line with Permenkes of the Republic of Indonesia No.356 / MENKES / PER / 2008 on April 14 2008 concerning Organization and Procedure Port Health Office Work (5). The number of Umrah pilgrims arises every year, approximately 10% of the world Umrah pilgrims are from Indonesia. In 2016, as many as 5,053 Umrah pilgrims from Southeast Sulawesi were recorded at KKP Kendari, increased to 9,306 people in 2017, and decreased to 6,967 people in 2018. Meanwhile, from January to March 2019, there were 2,455 people recorded (6).

As many as 538 out of 865 Umrah pilgrims in January, 321 out of 445 Umrah pilgrims in February, 133 out of 313 Umrah pilgrims in March, and 117 out of 225 Umrah pilgrims in April 2019 have received meningitis vaccination (6).

Efforts to increase the knowledge of Umrah pilgrims about the benefits of meningococcal meningitis vaccination can be done through the Umrah travel agency and through the Port Health Office by providing information to the Umrah travel agency to coordinate the timely implementation of the meningitis vaccination. Late vaccination is very dangerous because of the risk of increasing transmission of meningitis and causes disturbance of hearing, brain damage and even death (7).

The results of the interview on 5 Umrah pilgrims showed that 2 of them said that they did not know the benefits of receiving meningitis vaccination but only to acquire visa permit to the country of Saudi Arabia, while the rest who had a lower level of education did not receive meningitis infection ever postponed the vaccination.

Based on these backgrounds, we built this present study to understand the association between educational level and knowledge to the adherence to meningococcal meningitis vaccination at KKP Kendari.

METHODS

This study was an analytical descriptive with cross-sectional study design. The samples were 69 people who were obtained through a purposive sampling technique. The dependent variable of this present study was adherence to meningitis vaccination and the independent variables were educational level and knowledge. The data were analyzed by the chi-square test.

RESULTS AND DISCUSSIONS

Table 1. Characteristics of respondents

Age (year)	n	%
20-35	8	11.6
36-50	17	24.6
51-70	44	63.8
Total	**69**	**100**
Sex		
Male	19	27.5
Female	50	72.5
Total	**69**	**100**
Level of education		
University	19	27.5
High School	25	36.2
Junior High School	14	20.3
Elementary School	11	15.9
Total	**69**	**100**
Occupation		
Civil Servants	18	26.1
Teachers	2	2.9
Entrepreneurs	15	21.7
House Wives	28	40.6
Farmers	3	4.3
Students	3	4.3
Total	**69**	**100**

Source : primary data, 2019

Table 1 shows that the majority of respondents aged between 51 – 70 years old as many as 44 people (63.8%), 50 respondents were female (2.5%),25

respondents were senior high graduated (36.2%) and most of the respondents were housewives as many as 28 people (40.6%).

Table 2. Distribution of Study Variables

Adherence to vaccination	n	%
Complied	44	63.8
Did not comply	25	36.2
Total	**69**	**100**
Level of education		
High	44	63.8
Low	25	36.2
Total	**69**	**100**
Knowledge		
Good	45	65.2
Less	24	34.8
Total	**69**	**100**

Source: Primary data, 2019

Table 2 shows that most of the respondents complied with the vaccination as many as 44 people (63.8%), 44 respondents (63.8%) had a high level of education, and the majority of respondents (65.2%) had good knowledge.

Table 3. The Association Between The Level of Education and The Adherence on Meningococcal Meningitis Vaccination in Umrah Pilgrims at Port Health Office Kendari

Level of education	Adherence to vaccination				Total	
	complied		Did not comply			
	n	%	n	%	n	%
High	22	31.9	22	31.9	44	63.8
Low	22	31.9	23	4.3	25	36.2
Total	44	63.8	25	36.2	69	100.0
ρ value = 0.360						

Source: Primary data, 2019

Table 3 shows that of 42 respondents (60.9%) with high a level of education, 25 respondents (36.2%) complied on meningococcal meningitis vaccination, and the other 17 respondents (24.6%) did not comply the vaccination. Meanwhile, of 27 respondents (39.1%) with low education level, 19 respondents (27.5%) complied on meningococcal meningitis vaccination and the other 8 respondents (11.6%) did not comply.

The chi square test result shows that ρ value = 0.445 indicating no association between level of education and the adherence to meningococcal meningitis vaccination in Umrah pilgrims at KKP Kendari. This indicates that the respondents with a high level of education do not guarantee the adherence to the meningitis vaccination as they do not understand the benefits of vaccination and the health risks attributed to the absence of meningitis vaccination.

A study by Syara Oktaviana (2018) showed a chi-square test p=0.827 indicating no association between level of education and meningitis vaccination. Most respondents with a low level of education (25%) did not adhere to the meningitis vaccination, in contrast, respondents with the high level of education (21.2%) tended to adhere to the vaccination (8).

Education is a process of behavioral change, the higher the level of education, the more selective they are on selecting the health service. Education is a factor affecting someone's behavior, maturity and attitude, thus he can select and decide appropriately. Education influences the learning process, the higher a person's education is, the easier it is for the person to receive information. With higher education, a person will tend to get information from others and the mass media. The more information that comes in the more knowledge gained, also includes knowledge about health (9). We assumed that, in this present study, high education cannot guarantee adherence to the meningococcal meningitis vaccination in Umrah pilgrims.

Table 4 The Assocation between knowledge and the adherence to meningococcal meningitis vaccination in Umrah pilgrims at Port Health Office Kendari

Knowledge	Adherence to vaccination				Total	
	complied		Did not comply			
	n	%	n	%	n	%
Good	34	49,3	11	15,9	45	65,2
Less	10	14,5	14	20,3	24	34,80
Total	**44**	**63,8**	**25**	**36,2**	**69**	**100**
ρ value = 0,005						

Source: Primary data, 2019

Table 4 shows that of 45 (65.2%) respondents with good knowledge, 34

respondents (49.3%) complied the meningococcal meningitis vaccination and the other 11 respondents (15.9%) did not comply the vaccination. Meanwile, of 24 respondents (34.8%) with less knowledge, 10 respondents (14.5%) complied the meningitis vaccination and the other 14 respondents (20.3%) did not comply the meningitis vaccination.

The chi-square test shows ρ value = 0.005, indicating an association between knowledge and the adherence to meningococcal meningitis vaccination in Umrah pilgrims at KKP Kendari. This is because of the better the knowledge, the better the adherence to the meningococcal meningitis vaccination.

This present study is in line with a study by Roza (2013) that showed an association between knowledge and the adherence to vaccination. However, Roza only studied the vaccination coverage, hence only respondents who adhered to the vaccination that had been studied for their compliance with the vaccination time (10).

Theoretically, knowledge or cognitive is an important domain in shaping someone's behavior or action (overt behavior). If behavioral change is based on positive knowledge and attitude, then the change will be lasted (long-lasting). This theory reveals that when one's behavior is not based on knowledge and awareness, it will tend to create a temporary behavior (11).

We assumed that the better the knowledge about the benefits of vaccination and the impact of not having meningitis vaccination, the better the compliance to the vaccination.

CONCLUSION AND SUGGESTIONS

This study concludes that one's level of education does not guarantee compliance with meningitis vaccination. It is recommended to increase counseling about the dangers if not doing vaccination before Umrah.

REFERENCES

1. Ministry of Health of the Republic of Indonesia, Regulation of the Minister of Health of the Republic of Indonesia Number 42 of 2013 concerning Immunization Implementation. Jakarta : Ministry of Health, 2013.
2. WHO, Definition of Immunization, 2015
3. Mutia Ika Ardyantari, Transparency of Services in Meningitis Vaccination for Prospective Umroh Pilgrims at the Port Health Office Class II probolinggo, working area of Tanjungwangi Port Banyuwangi Regency. Journal, 2014
4. Cahyono, S. B, Vaccination Effective Ways to Prevent Infectious Diseases. Yogyakarta: Kanisisus, 2010
5. Permenkes RI No.356/MENKES/PER/2008 about the Organization and Work Procedures of the Port Health Office. Port Health Office Semarang, 2008
6. Port Health Office Kendari, health service information system. Kendari, 2019
7. Muahdir, Association of Education Level, Family Support and the Role of Health Workers with a History of Basic Immunization. *Scientia Journal*, 2012. Volume 5 No. 2, pp. 157-166
8. Hafshoh SO, Musthofa SB, Husodo BT, Masyarakat FK, Diponegoro U. Umrah pilgrims towards meningitis vaccine in office. 2019;7.
9. Notoatmodjo, Health behavioral science. Jakarta: Rineka Cipta, 2010
10. Roza S E. The Association between Knowledge and Attitudes of Mother Toddler with Measles Immunization Coverage in Aur Kuning Sub-District of Working Area Tigo Baleh Health Center in 2013. Journal of D-III Study Program of Midwifery Stikes Prima Nusantara Nusantara. 2013 : volume 1. number 1
11. Wawan A dan Dewi M. Theory and Measurement of Knowledge, Attitudes and Human Behavior. Yogyakarta: Nuha Medika, 2010

KLASICS
Kendari Journal of Maritime and Holistic Nursing
https://stikesks-kendari.e-journal.id/K
Volume 01 | Number 01 | Januari | 2021
E-ISSN : 2774-6577

Factors Associated With the Incidence of Hypertension on Elderly In Kandai Public Health Center, Kendari

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Keywords *:*
Smoking Habit, Salt Consumption, Alcohol Consumption, Hypertension, Elderly

Abstract*. Hypertension is a circulatory system disorder that causes an increase in blood pressure above normal. The tendency of people to live a dynamic lifestyle, consume instant food, consume high-fat food, smoke, and consume alcoholic beverages is very influential on health. This study aimed to determine the factors associated with the incidence of hypertension in the elderly at the Kandai Health Center in Kendari. The design used in this study was a descriptive-analytic study with a cross-sectional design. This study was carried out at the Kandai Health Center in Kendari for 47 respondents taken by accidental sampling. Analysis of the data used in this research was Chi-Square Test analysis. The results showed there was an association between smoking habits and the incidence of hypertension in the elderly (p = 0.011 <0.05), there was an association between salt consumption and the incidence of hypertension in the elderly (p = 0.014 <0.05) and there was an association between alcohol consumption and the incidence of hypertension in the elderly (p = 0.020 <from α = 0.05). Conclusions in this study are smoking habits, salt consumption and alcohol consumption associated with the incidence of elderly hypertension. Suggestions in this study are for the parties of the Kandai Health Center, Kendari to improve services to the elderly through posbindu so that they can be controlled from non-communicable diseases suffered by the elderly.*

INTRODUCTION

Hypertension is a circulatory system disorder that causes an increase in blood pressure above normal systolic ≥ 140 mmHg and diastolic ≥ 90 mmHg (1). Hypertension is often recognized as a "silent killer" as the patients do not feel or realise the specific symptoms if there have been complications such as heart disease, stroke, or kidney damage (2).

The effect of times has an impact on the lifestyle change of society. People today tend to have a dynamic lifestyle, consume instant food, consume high-fat food, smoking, and consume alcoholic beverages that affect health and can have an impact when they are aging. Hypertension has a close relationship with the elderly because the elderly undergo an aging process causing the body to experience various health problems and loss of endurance (3).

World Health Organization (WHO) globally predicted that about 1 billion people worldwide suffered from hypertension in

2017 (4). In Indonesia, data on national health survey showed that 34.1% of people ≥ 18 years old suffered from hypertension with the highest prevalence found in South Kalimantan (44.1%) and the lowest was in Papua, 22.2% (5).

Data from the Health Department of Kendari shows a fluctuating prevalence of hypertension from 2016 to 2018, 10,559 patients, 9,933 patients, and 13,140 patients, respectively (6). Meanwhile, in Kandai Public Health Centre, hypertension has been increased during the last 3 years, 77 patients, 83 patients, 77 patients, and 86 patients in 2016, 2017, and 2018 respectively and remains increasing in May 2019, as many as 87 patients (7).

The result of a preliminary study in 10 elderly people suffering from hypertension, 5 patients had smoking habit, 2 patients often consumed salty food, such as salty fish, egg or add salt to food, and 3 other patients had excessive alcohol consumption. Of all the aforementioned reasons, it is important to study factors associated with the incidence of hypertension in the Elderly in Kandai Public Health Center, Kendari.

METHODS

This study was a descriptive-analytic with a cross sectional study design. The study was carried out in Kandai Health Center, Kendari in 47 elderly people with hypertension that were selected through an accidental sampling. The data were analysed using chi-square test.

RESULTS AND DISCUSSION

Table 1 Characteristics of respondents in Kandai Public Health Center, Kendari

Demographic Data	n (%)
Age (years)	
60-74	30 (63.8)
75-90	17 (36.2)
Total	**47 (100)**
Sex	
Male	26 (55.3)
Female	21 (44.7)
Total	**47 (100)**
Education	
Elementary School	25 (53.2)
Junior High School	10 (21.3)
Senior High School	12 (25.5)
Total	**47 (100)**

Source : primary data, 2019

Table 1 shows that the majority of respondents were aged 60 – 74 years old as many as 30 people (63.8%). Most of the respondents were male (55.3%), and were elementary graduates (63.2%).

Table 2 Distribution of Study Variables in Respondents in Kandai Health Center, Kendari

Study Variables		Mean (Min-Max)	n (%)
Blood Pressure			
Stage 1 Hypertension	Systolic (mmHg)	145.26 (140-155)	19 (40.4)
	Diastolic (mmHg)	92.11 (90-100)	
Stage 2 Hypertension	Systolic(mmHg)	177.68 (160-210)	28 (59.6)
	Diastolic (mmHg)	107.86 (100-120)	
Smoking Habit			
Not smoking			24 (51.1
Smoker			23 (48.9
Salt Consumption			
Yes			25 (53.2
No			22 (46.8
Alcoholic Beverage Consumptions			
Yes			22 (46.8
No			25 (53.2

Source: primary data, 2019

As seen in Table 2, most of the respondents suffered from stage I hypertension, as many as 28 people (59.6%) with the mean of systolic was 177.68 mmHg, the lowest was 160 mmHg, and the highest was 210 mmHg. Meanwhile, the mean of

diastolic was 107.86 mmHg, the lowest was 100 mmHg, and the highest was 120 mmHg. The majority of respondents were not a smoker (51.1%), had excessive salt consumption (53.2%), and did not consume alcoholic beverages (53.2%).

Table 3 the Association between Smoking Habit and the Incidence of Hypertension in the Elderly in Kandai Health Center, Kendari

Variable	Incidence of Hypertension				*Number*		*p*
Smoking habit	*Stage 1* Hypertension		*Stage 2* Hypertension				
	n	%	n	%	n	%	
Not smoking	14	29.8	10	21.3	24	51.1	0.011
smoker	5	10.6	18	38.3	23	48.9	
Total	19	40.4	28	59.6	47	100	

Source: primary data, 2019

The chi-square test shows *p* value = 0.011 indicates that there was an association between smoking habit and the incidence of hypertension in the elderly.

The result of the study shows that there was an association between smoking habits and the incidence of hypertension in the elderly in Kandai Public Health Center, Kendari. This might be due to the fact that respondents who are smokers are higher than those who did not smoke. Smoking is known to be a reinforcing factor for hypertension in the elderly.

This study is following the same result with previous studies. A study by Retnaningsih (2016) shows that hypertension is associated with the smoking habits in the male elderly (8). Likewise, a study by Sartik (2017) also shows a significant association between smoking habits and hypertension (2).

Cigarette smoking is often associated with hypertension. The associations between cigarette smoking and the increase in cardiovascular risks have been in many studies. Toxic chemicals, such as nicotine and carbon monoxide, inhaled through smoking can enter the bloodstream and damage endothelial lining of arteries and cause atherosclerosis and hypertension (9).

The brain reacts to nicotine by giving signals to the adrenal glands to release epinephrine (adrenaline). This strong hormone will constrict blood vessels and force the heart to work harder because of higher pressure. After smoking only two cigarettes, both systolic and diastolic pressures will increase by 10 mmHg (9).

Authors assumed that smoking habit in a long duration may increase the risk of suffering hypertension in the elderly, moreover, aging can decrease the functions of organ. Therefore, the higher the smoking category of individual, the higher the risk of suffering from hypertension.

Table 4 the Association between Salt Consumption and the Incidence of Hypertension in the Elderly in Kandai Health Center, Kendari

Variable	Incidence if Hypertension				*Number*		*p*
Salt Consumption	*Stage 1 Hypertension*		*Stage 2* Hypertension				
	n	%	n	%	n	%	
Yes	6	12.8	19	40.4	25	53.2	0.014
No	13	27.7	9	19.1	22	46.8	
Total	19	40.4	28	59.6	47	100	

Source: primary data, 2019

The chi square test shows *p* value = 0.014 indicates that there was an association between salt consumption and the incidence of hypertension in the elderly.

The result of the study shows that there was an association between excessive salt consumption and the incidence of hypertension in the elderly in Kandai Public Health Center, Kendari. The excessive salt consumption occurs because most of the respondents often consume salty food. Besides that, respondents are also smokers and consume alcoholic beverages that increase the risk of suffering hypertension.

This study is in line with a study by Susanti (2017) which shows an association between natrium intake and systolic and diastolic blood pressure (10). Likewise, a study by Suprihatin (2012) also shows that excessive salt consumption is the risk factor for hypertension (11).

Salt is essential as a risk factor for hypertension. Salt consumption affects the increase of plasma volume (body fluid) and blood pressure. This condition will be followed by the increase of excessive salt excretion to maintain normal hemodynamic conditions (9).

Authors concluded that high consumption of salt can increase the risk of getting hypertension which implies that salt consumption has a linear association with the incidence of hypertension in elderly.

Table 5 the Association between Alcoholic Beverage Consumption and the Incidence of Hypertension in the Elderly in Kandai Health Center, Kendari

Variable	Incidence of hypetension						
Alcohol consumption	*Stage 1 Hypertension*		*Stage 2 Hypertension*		***Number***		***p***
	n	**%**	**n**	**%**	**n**	**%**	
Yes	5	10.6	17	36.2	22	46.8	0.020
No	14	29.8	11	23.4	25	53.2	
Total	19	40.4	28	59.6	47	100	

Source: primary data, 2019

The chi-square test shows *p* value = 0.020 indicates that there was an association between alcoholic beverage consumption and the incidence of hypertension in the elderly.

The result of the study shows that there was an association between alcohol consumption and the incidence of hypertension in the elderly in Kandai Public Health Center, Kendari.

This result is in line with a study by Makaremas (2018) that shows an association between duration of alcohol consumption and the incidence of hypertension in males aged 35-59 years old (12). Likewise, a study by Grace, Malonda, Jayanti, Sarumaha, and Komaling (2018) also shows that alcohol consumption is a risk factor of hypertension (13–16).

High alcohol consumption tends to increase the risk of hypertension though the mechanism remains unclear. However, it is presumed that the increase of cortisol level and red blood cell volume, as well as blood coagulation, can increase blood pressure. It is predicted that excessive alcohol consumption causes about 5 – 20% of all cases of hypertension (9).

The author assumed that alcoholic beverage consumption can increase the risk of hypertension in the elderly. There is a linear association between alcohol consumption and hypertension in elderly, moreover, some organs can lose their function during adulthood and thus exacerbate the risk of getting hypertension.

CONCLUSION AND SUGGESTIONS

This study concluded that there is an association between smoking habit, salt consumption and alcoholic beverage consumption with the incidence of hypertension in the elderly.

It is suggested to the Kandai Public Health Center party, to improve health care for the elderly. For the elderly and their family, to improve participation to posbindu and develop knowledge about the degenerative disease by controlling food patterns, smoking habits, salt and alcohol consumption in the elderly. Meanwhile, for the next research, it is suggested to develop study variables about hypertension in the elderly.

REFERENCES

1. Santi DD. Hubungan Tingkat Konsumsi Garam Terhadap Kejadian Hipertensi Di Nagari Lunang Barat Wilayah Kerja Puskesmas Tanjung Beringin Kecamatan Lunang Kabupaten Pesisir Selatan Tahun 2014. Universitas Andalas; 2015.
2. Sartik, Tjekyan RS, Zulkarnain M. Faktor – Faktor Risiko Dan Angka Kejadian Hipertensi Pada Penduduk Palembang. J Kesehat Masy. 2017;8(3):180–91.
3. Nurillah R. Hubungan gaya hidup terhadap terjadinya risiko hipertensi pada lansia di wilayah puskesmas unit ii kecamatan sumbawa. Universitas Muhammadiyah Malang; 2018.

4. WHO. Global brief of hypertension. Switzerland: WHO; 2017.
5. Kementerian Kesehatan RI. Hasil Utama Riskesdas 2018. Kementrian Kesehatan Republik Indonesia. Jakarta; 2018. 1–100 p.
6. Dinkes Kota Kendari. Profil Kesehatan Dinas Kesehatan Kota Kendari. Kendari: Dinas Kesehatan Kota Kendari; 2018.
7. Puskesmas Kandai. Profil Puskesmas Kandari. Kendari: Puskesmas Kandai; 2018. 137 p.
8. Retnaningsih D, Kustriyani M, Sanjaya BT. Perilaku merokok dengan kejadian hipertensi pada lansia. J Keperawatan Indones. 2016;4(3):122–30.
9. Sugiharto A. Faktor-Faktor Risiko Hipertensi Grade II Pada Masyarakat. Universitas Diponegoro; 2013.
10. Susanti MR. Hubungan Asupan Natrium Dan Kalium Dengan Tekanan Darah Pada Lansia Di Kelurahan Pajang. Naskah Publ Univ Muhammadiyah Surakarta. 2017;
11. Suprihatin. Analisis Faktor Resiko Kejadian Hipertensi pada Masyarakat di Desa Sruni Musuk Boyolali. Universitas Muhammadiyah Surakarta; 2012.
12. Makaremas JE. Kebiasaan Konsumsi Alkohol Dan Kejadian Hipertensi Pada Laki-Laki Usia 35-59 Tahun Di Kota Bitung. J KESMAS. 2018;7(5).
13. Grace TG. Hubungan Antara Konsumsi Alkohol Dengan Kejadian Hipertensi Pada Pasien Rawat Jalan Di Puskesmas Kolongan Kecamatan Kalawat Kabupaten Minahasa Utara. J KESMAS. 2018;7(5).
14. Malonda NSH, Dinarti LK, Pangastuti R. Pola makan dan konsumsi alkohol sebagai faktor risiko hipertensi pada lansia. J Gizi Klin Indones. 2012;8(4):202.
15. Jayanti IGAN, Wiradnyani NK, Ariyasa IG. Hubungan pola konsumsi minuman beralkohol terhadap kejadian hipertensi pada tenaga kerja pariwisata di Kelurahan Legian. J Gizi Indones. 2018;6(1):65–70.
16. Komaling JK. Hubungan Mengonsumsi Alkohol Dengan Kejadian Hipertensi Pada Laki-Laki Di Desa Tompasobaru II Kecamatan Tompasobaru Kabupaten Minahasa Selatan. e-Journal Keperawatan (e-Kp). 2013;1(1):487–92.

KLASICS
Kendari Journal of Maritime and Holistic Nursing
https://stikesks-kendari.e-journal.id/K
Volume 01 | Number 01 | Januari | 2021
E-ISSN : 2774-6577

Overweight Handbook Increases Physical Activity of Students at Frater Junior High School, Kendari

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Keywords *:*
Overweight; Physical Activity; Adolescent.

Abstract. The prevalence of overweight in adolescence at junior high (SMP) school Frater was 14.1% (exceeded the standard of the nutritional problem for 10%), and thus requires innovation in form of a handbook to overcome the obesity problem. This study aimed to know the effect of the overweight handbook on the physical activity in adolescents at SMP Frater Kendari. This was a quantitative study (pre-experimental study) with a pre-test post-test study design that was done from *7* May-14 July 2018. The population of the study was all students with overweight status at SMP as many as 38 people and the samples were 32 students that were selected through a simple random sampling. The physical activity level was assessed using IPAQ for 4 times and analyzed using the Wilcoxon sign rank test. The results of the study showed that the average METs score of the activity level in pre-measurement was 280 METs per week and the post-measurement 669 METs per week. Meanwhile, the result of the paired t-test on physical activity showed p value (0.000)<α (0.05). This present study concludes that there is an effect of the overweight handbook to the increase on physical activity level of the adolescents. It is suggested to the overweight student at SMP Frater to read the handbook regularly and increase their activity level by exercising at least 30 minutes for 2 -3 times per week and to the school party, to educate the student routinely about overweight using the handbook.

INTRODUCTIONS

Overweight is a global health problem that can be due to a lack of physical activity (1). Obesity is a condition when body weight excesses the normal standard and causes health problems for the sufferer (2). The negative impacts of obesity are metabolic disorders and increased risk of degenerative diseases such as type 2 diabetes mellitus, ischemic stroke, and coronary heart attack. (3)

World Health Organization (WHO) stated that overweight people aged over 15 years around 1.6 billion people and obese people as many as 400 million people. Out of 10 (ten) children, 1 person is overweight, and an increase in cases of obesity in children and adolescents is in line with an increase in cases of obesity in adults (4).

Indonesia is ranked 10th in the list of countries with the highest levels of overweight in the world, as many as 40 million adults who are overweight. Based on data from the Basic Health Research (Riskesdas) in 2013 as many as 18.8% of children aged 5-12 years

overweight and 10.8% suffered from obesity, besides the prevalence of obese adolescents aged 13-15 years in Indonesia by 10.8% consisting of 8.3% overweight and 2.5% obese (5). This is still below the standard indicator of nutritional problems, especially fat which is 5% (3).

Overweight examination results in Southeast Sulawesi in 2015 among people aged 15 years and over who visited the public health centers were 33.67% overweight (6), while data obtained from the Health Office of Kendari in 2015 found 17.05% were obese and experienced an increase of 29.27% in 2016 (7).

Factor associated with overweight such as environmental factors for example lack of physical activity (8). In developing countries, factor affecting the high prevalence of overweight is a lifestyle (9). Based on this reason, adolescents are categorized into the high-risk group for overweight (10). A study by Deysy showed that physical activity associated with the prevalence of overweight (11)

Prevention of obesity early on in the group of adolescents can be easily done than overcoming obesity in the adult age group, this is because efforts to change lifestyles and lose weight in someone who is obese are more difficult than preventing early on when they are still teenagers. Prevention of overnutrition in adolescents can be done by providing health education that is conveying information related to how to lose weight and regulate eating behavior and monitor adolescent body weight (12).

One of the health education efforts can be done to prevent and overcome overweight is education using handbook about nutritional status measurement in adolescent including information on definition, causes, impact, and how to prevent overweight as well as information on how to measure nutritional status so that adolescents can understand their nutritional status and make it as a guide to prevent overweight.

A study by Mahdali showed that nutrition education can increase knowledge, attitude and breakfast habit in adolescents who are overweight (13), furthermore, a study by Wulandari and Prameswari (2017) also showed an effect of nutrition education using comics is increasing (14). The nutrition education using various media has been done however, handbook media use is limited.

Based on the results of a preliminary study in Junior High Schools in Kendari, it can be seen that visually the incidence of overweight as Frater Junior High is more common than in other schools. Based on the results of the screening of all students at the Frater Junior High School, it can be seen that from 270 students, there were 38 students (14.1%) whose nutritional status was over, namely 17 people (44.7%) who were obese and 21 people (55.26%) were overweight, then there were 10 thin people (3.7%) and 222 people (82.2%) with normal category (15). These data show that nutritional problems, especially overweight at Frater Junior High School have exceeded the standard of 10% so that innovation is needed to overcome overweight. Besides that, Frater Junior High School also has a school health organization (UKS) that deals with health problems for students, but UKS officers did not understand how to assess nutritional status and efforts to prevent overweight in the form of counseling using media handbooks.

Based on this phenomenon, it is important to conduct a study to know the effect of the overweight handbook on the physical activity of adolescent, therefore the hypothesis of this present study was the overweight handbook can increase the physical activity of students at SMP Frater Kendari.

METHODS

This study was a pre-experimental study with one group pre-test post-test design when measurement made twice, one before treatment (pre-test) and the other one was made after treatment (post-test). This study was conducted from May 7th – July 14th. The population of the study was all students who were overweight at SMP Frater Kendari as many as 38 students, and 32 of them were selected as samples through a simple random sampling technique.

The physical activity measured in this present study was the amount of energy spent by the body each minute within a week. The physical activity was measured using the International Physical Activity Questionnaire (IPAQ), with objective criteria measured in

METs/week (16). The physical activity measures 4 times, namely pre-test, followed by the 2nd, 3rd and post-test measurements.

The data were analyzed descriptively to show the physical activity change over weeks and inferentially using the Wilcoxon sign rank test.

RESULTS AND DISCUSSIONS

1. Characteristics of Respondents

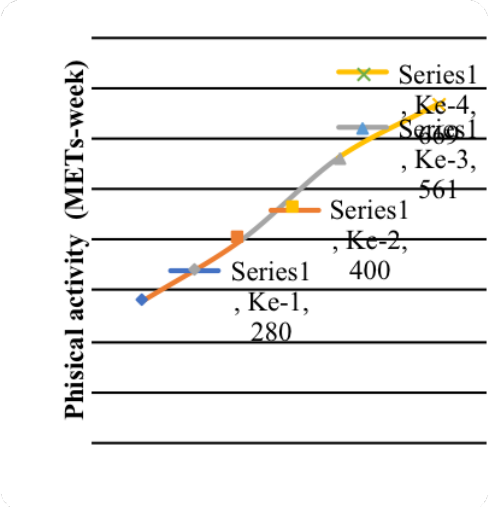
Table 1. Distribution of respondent's characteristics at SMP Frater Kendari in 2018

Characteristics

Characteristics	n (32)	%
Age		
14	12	37.5
15	17	53.1
16	3	9.4
Sex	**n**	**%**
Male	17	53.1
Female	15	46.9
Class	**n**	**%**
VII	19	59.4
VIII	13	40.6

Table 1 describes that among 31 respondents, most of them aged 15 years old (53.1%), women (46.9%), and were at the grade (59.4%).

2. **Physical Activity**



Graphic 1. Distribution of respondents based on physical activity SMP Frater Kendari year 2018

Graphic 1 shows an increase of physical activity in the overweight adolescents at SMP Frater Kendari, the average METs score of physical activity at the first measurement was 280 METs per week, then increased to 400 METs at the second measurement, 561 METs at the third measurement, and 660 METS per week at the fourth measurement.

3. **The result of the Wilcoxon sign rank test**

Table 2. Wilcoxon sign rank test result

Time of Measurement	n	*mean*	*P value*
Pre Test	32	280	0.000*
Post Test	32	669	

* *p-value* of *Wilcoxon sign rank test*

mean difference 389

Table 2 shows the mean of physical activity of adolescents before receiving the overweight handbook was 280 METs per week and became 669 METs per week after receiving the handbook. The mean of physical activity increase was 389 METs per week.

The result of the Wilcoxon sign rank test showed p value 0.000 < α (0.05) means that the overweight handbook affected the increase of physical activity in adolescents at SMP Frater Kendari.

The result of the study showed the mean of METs score increased over time of measurement. The mean physical activity level before receiving the overweight handbook was 280 METs per week and became 669 METs per week after receiving the handbook. The physical activities exercised by male adolescents were very intense such as playing basketball, cycling, and swimming, while the female adolescents did moderate exercises which are mostly done at home such as cooking, washing, moping. These physical activities were done 3-4 times per week with a duration of approximately 30 minutes.

The result of the Wilcoxon sign rank test concluded that the overweight handbook can increase the physical activity of adolescents at SMP Frater Kendari that can be seen form an increase in their physical exercise. This condition was due to the role of overweight

handbook and also their motivations to increase their activity level after understanding that overweight can be decreased by doing more exercise or house chores with a duration of more than 10 minutes or frequent every day. This study did not change adolescent's behavior at SMP Frater but rather change their action in doing physical exercises that were done during the study period. The change of student's physical activity is also supported by the monitoring process to control the frequency of physical activity by giving a motivation to do regular exercise daily.

This present study is in line with a study by Siahaan et al, that found physical activity differences between overweight and normal nutritional status group (17). Furthermore, a previous study by Kartika also found a significant difference of physical activity between obese and non-obese people (18). The obesity in adolescents is due to food habit which consumes a high amount of food, lack of physical activity while physical activity burns calories therefore the more active, the higher the energy burnt (19).

A study by Lanita et al. in 2015 showed that high-intensity exercise is potential media that is effective and economical to burn fat people who are overweight. Therefore, adolescents are suggested to do intense exercises and useful and healthy physical activities, such as tidying the bedroom, walking, sweeping and mopping as well as doing healthy exercises such as playing football, basketball, badminton, cycling, and jogging (20).

This study is also supported by the result of the National Health Survey (Riskesdas) that found the major factors of overweight are lack of physical activity, lifestyles change, food habit that tends to eat food with high fat and less fiber (5). This present study is also in line with a study by Rostania at Elementary school Sudirman 1 which aimed to know the effect of nutrition education on knowledge and sedentary lifestyles in obese children and found significant differences comparing before and after receiving nutrition education with p=0.001 (21). Besides, a study by Podojoyo et al that has been conducted on 46 samples by giving intervention in form of nutrition counseling studying indicator of body weight showed significant difference in body weight of adolescents before and after getting nutrition counseling for 8 weeks ($p<0.001$) (22).

CONCLUSION AND SUGGESTIONS

This study concludes that the overweight handbook significantly increased the physical activity of adolescents at SMP Frater Kendari.

It is suggested for overweight students at SMP Frater Kendari to increase their physical activity by exercising at least 3o minutes for 2-3 times per week and for the next study to include the control group as a comparison.

REFERENCES

1. Greenway FL. Physiological Adaptations to Weight Loss and Factors Favouring Weight Regain. Int J Obesity. 2015;39; 1188.
2. GINTING PN. Association between overweight and emotional status of chidlren. University of Sumatera Utara; 2013.
3. The Health Department of Kendari. The Health profile of Kendari in 2016. Kendari : Southeast Sulawesi; 2017.
4. WORLD HEALTH ORGANIZATION. Obesity. Situation and trends. Geneva; 2015.
5. The Health ministry of RI. Basic Health Survey 2013. Jakarta; 2013.
6. The Heath Department of Sultra. The health profile of Southeast Sulawesi. 2016. p. 274.
7. The Health Department of Kendari. he Health profile of Kendari in 2016. Kendari; 2017.
8. Roda, C., Charreire, H. FT. Lifestyle Correlates of Overweight in Adults: a Hierarchical Approach (The Spotlight Project). Int J Behav Nutr Phys Act. 2016;13: 114(ISSN: 1479-5868).
9. Patimah S. Nutrition of female adolescent plus 1000 early days of life. Bandung: PT. Refika Aditama; 2017.
10. Nurt, A, Wati S. Body image in obese and non-obese female adolescents: Cross Sectional study. Res Study. 2017;
11. Deysi Adam, J. M. L. U. SW. Risk factors of obesity in adolescents at SMAN 1 Kabila Bone Bolango Regency. Sam Ratulangi University;

2016.
12. Supariasa I. Health education media .Yogyakarta: Graha Ilmu; 2012.
13. Mahdali, M.I RT. The effect of nutrition education to knowledge, attitude and behavior change of obese adolescents in Gorontalo. State University of Gorontalo; 2013.
14. Wulandari M dan Prameswari G. comics media to increase nutritional knowledge and attitude of overweight and obese children . J Heal Educ. 2017;
15. SMP Frater Kendari. interview at SMP Frater Kendari. Kendari : Sulawesi Tenggara.; 2018.
16. Reed, DB., Patterson, PJ., Wasserman N 2011. Obesity in Rural Youth: Looking Beyond Nutrition and Physical Activity. J Educ Behav. 2011;43(5), 401.
17. Maria Yensiska Siahaan, Martha Irene Kartasurya S. difference of eating pattern between overweight and normal nutritional status of female adolescents at SMAN 1 Siborongborong Medan Tahun 2017. J Kesehat Masy [Internet]. 2017;Volume 6,(ISSN: 2356-3346). Available from: http://ejournal3.undip. ac.id/index.php/jkm
18. Kartika Suryaputra. Difference of eating habit and physical activity between obese and non-obese adolescents. Airlangga University, Surabaya, Indonesia; 2012.
19. Al J et. Effect of Exercise Duration and Intensity on Weight Loss in Overweight, Sedentary Women. Jama a randomized trial. 2010;
20. Lanita U, Toto S EH. The effect of health education by short message service (SMS) and booklet about obesity in overweight and obese adolescents. J Gizi Klin Indones. 2015;Vol 12 No.
21. Rostania, M., Syam, A., Najamuddin U. The effect of nutrition education on knowledge and sedentary lifestyle changes in overweight children at SDN Sudirman 1 Makassar. Hasanuddin University; 2013.
22. Podojoyo, Susyani N. Nutrition counseling to loss body weight in overweight and obese adolescents in Palembang. J Pembang Mns. 2012;

KLASICS
Kendari Journal of Maritime and Holistic Nursing
https://stikesks-kendari.e-journal.id/K
Volume 01 | Number 01 | Januari | 2021
E-ISSN : 2774-6577

Relationship between Neonatal Asphyxia and Exclusive Breastfeeding with Febrile Seizures in Children in the Bahteramas General Hospital, Southeast Sulawesi

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Keywords *:*
Neonatal Asphyxia, Exclusive Breastfeeding, Febrile Seizure, Toddler

Abstract. According to the Institute of Health Consensus Conference, the occurrence of febrile seizures in infants and toddlers aged 3 – 5 years old is associated with fever without any evidence of infection or intracranial causes. Children with a high body temperature of 38^0C (rectal temperature) are subject to febrile seizure. About 90% of febrile seizures sufferers are children under five years. In Indonesia, the prevalence of febrile is estimated to 2 – 4% while the data shown in Bahteramas Hospital during the past three years indicated an increased incidence of febrile seizures in as many as 17, 87, and 149 patients respectively in 2013, 2014, and 2015. The present study aimed to understand the relation between neonatal asphyxia and exclusive breastfeeding to the incidence of febrile seizures in children at Bahteramas Hospital, Southeast Sulawesi. This study is an analytical study with a case-control approach. The population of the study was mothers whose child suffering from febrile seizures in Mawar room from January to Mei 2016 as many as 105 patients, later 60 patients were enrolled in the study using an accidental sampling technique. The statistical analysis was made using an odds ratio and binary logistic regression. The results show that neonatal asphyxia (OR=4.750) and exclusive breastfeeding (OR=4.929) are associated with the incidence of febrile seizures in children. It is suggested for mothers to prevent their toddlers from asphyxia and promoting a 6-month exclusive breastfeeding practice to naturally boost immunity from febrile seizure.

INTRODUCTION

Children under five years are susceptible to diseases[1]. At least, there are 10 disease symptoms generally experienced by toddlers. Thus, parents should be able to identify the common symptoms experienced by their child. As cited from a book by Su Laurent and Peter Reader "Your Baby Month by Month*",* these several common symptoms are cough, diarrhea, asphyxia, earache, excessive cry, fever, convulsion, rash, stomachache, and vomiting [2].

Febrile seizures are fits associated with fever symptoms and age without intracranial infection or abnormality. Meanwhile, fever is a spike in body temperature of more than 38^0C rectal or more than 37.8^0C axial[3]. Experts say children aged 3 months to 5 years old are susceptible to febrile seizures. Approximately

2-5% of children under five years experienced febrile seizures [4]. More than 90% of cases are found in toddlers. Most cases are found in children aged 6 – 22 months, with the highest incidence in children aged 18 months old[5].

Febrile seizures can be categorized into two based on the phenotype and duration namely the simple febrile seizures (65%) and the complex febrile (35 %) [6]. Several risk factors for febrile seizures including age, convulsion duration, and family history are known to be predictors for the neurological problem in the future[7, 8].

In America and Europe, the prevalence of febrile seizures is about 2-5%, meanwhile, in Asia, the prevalence is double, approximately 8.3 – 9.9%. Febrile seizures are among the major neurologic disorders in children. The associated risk factors are fever, age, family history, prenatal history (mother's age during pregnancy), perinatal history (asphyxia, gestational age, and low birth weight)[9].

In Indonesia, about 16% of toddlers suffered from neurologic and brain disorders such as convulsion, hearing disorders, macrocephaly, etcetera[10]. Boys are more susceptible to febrile seizure, about two times higher than girls. Approximately 30-40% of toddlers experienced recurrence[11]. In 2009-2010, about 2-4% cases of febrile seizures were reported[12].

A preliminary study conducted in Bahteramas General Hospital, Southeast Sulawesi in the past 3 years showed an increased incidence of febrile seizures in as many as 17, 87, and 149 patients respectively in 2013, 2014, and 2015. Meanwhile, in January - Mei 2016, 105 cases of febrile seizures were recorded.

METHODS

This study was an analytical observational study with a case-control approach. The dependent variable was the incidence of febrile seizures, while the independent variables were neonatal asphyxia and exclusive breastfeeding practices [13]. This study was conducted in 2 months. The population of the study was mothers whose child suffering from febrile seizures in Mawar room and 60 patients were enrolled in the study using an accidental sampling technique. The statistical analysis was made through an odds ratio analysis.

RESULTS AND DISCUSSIONS

The relationship between asphyxia and the incidence of febrile seizures in Bahteramas Hospital, Southeast Sulawesi in 2017

Of 30 children with asphyxia in the case group, 19 children (63.3%) suffered from febrile seizures and the other 11 children (36.7%) did not. Correspondingly, in the control group, of 30 children with no asphyxia, 8 children (26.7%) suffered from febrile seizures and the other 22 (73.3%) did not.

Table 1.
Risk factor analysis of children with asphyxia to the incidence of febrile seizures in Bahteramas General Hospital, Southeast Sulawesi in 2017

Babies with asphyxia	Group				Total		95%CI		
	Case		Control				OR	Low	Upp
	n	%	n	%	N	%			
In risk	19	63.3	8	26.7	27	45.0	4.750	1.584	14.245
Not in risk	11	36.7	22	73.3	33	55.0			
Total	30	100	30	100	60	100			

Source:Primary data, 2017

The OR = 4,750, with lower limit of 1.584 and upper limit was 14.245 and the interval did not contain 1, and thus the OR is statistically significant. Therefore, asphyxia is a risk factor for febrile seizures in children. Correspondingly, children with asphyxia are 4 times higher in risk of suffering from febrile seizures than children with no asphyxia.

Hypoxia can cause impairment of inhibitor function and increased excitation function of neurons. So that if there is stimulation, seizures will easily occur. Asphyxia can cause lesions in the hippocampus that can become the focus of

epileptogenic. In cases of asphyxia, it can result in hypoxic ischemia, esefalopathy which causes neuropathological disorders. Neurological disorders that occur may include non-progressive neurological disorders such as seizures. Mental retardation and psychomotor development disorders. Hypoxia and ischemia can cause an increase in intracellular sodium resulting in brain edema which results in brain damage. Hypoxia sensitive areas such as the brain stem and thalamus whereas ischemia are the hemispheric regions of the brain[14].

A study by Wijayahadi et al in Dr. Kariadi, Hospital Semarang with 164 respondents equally divided into both case and control groups showed that asphyxia is statistically known to be the risk factor for febrile seizures (OR=3.370)[9].

The relationship between exclusive breastfeeding practices and the incidence of febrile seizures in Bahteramas Hospital, Southeast Sulawesi in 2017

The result of the present study showed that of 30 children in the case group, 18 (60%) children who suffered from febrile seizures did not receive exclusive breastfeeding, while the other 12 (40%) children received exclusive breastfeeding. Meanwhile, in the control group (with no febrile seizure), 7 (23.3%) children did not receive exclusive breastfeeding and the other 23 (76.7%) children received exclusive breastfeeding.

The risk factor analysis of exclusive breastfeeding practice to the incidence of febrile seizures can be seen in Table 2.

Tabel 2.
Risk factor analysis of children with no exclusive breastfeeding practices to the incidence of febrile seizures in Bahteramas General Hospital, Southeast Sulawesi in 2017

Breastfeeding Practices	Groups				Total		95%CI		
	Cases		Controls				OR	Low	Upp
	n	%	n	%	N	%			
Yes	18	60.0	7	23.3	25	41.7	4.292	1.612	15.071
No	12	40.0	23	76.7	35	58.3			
Total	30	100	30	100	60	100			

Source:Primary data, 2017

Table 2 shows an OR= 4.292, with lower and upper limits are 1.612 and 15.071 respectively and did not contain 1, therefore the Odds Ratio is statistically significant. Thus, exclusive breastfeeding is a risk factor for febrile seizures in children. Correspondingly, children with no exclusive breastfeeding are 4 times higher in the risk of suffering from febrile seizures than children who have exclusive breastfeeding.

Immunity can be assessed by how often a child suffers from illness. Should a baby is getting sick easier, we should identify whether or not he received exclusive breastfeeding since the breastfeeding can provide various antibodies such Immunoglobulin A (IgA), IgG, IgM, IgD, and IgE that can protect children from pathogenic microorganism[15].
A study by Firdinand et al at Kota Palembang Public Health Center which registered 146 respondents, that equally divided into case and control groups, showed that exclusive breastfeeding practice associated with the incidence of febrile seizures (OR=3.336). children with no exclusive breastfeeding are 3 times higher in the risk of suffering febrile seizures than children who receive exclusive breastfeeding[16].

CONCLUSIONS AND SUGGESTIONS

Based on the study conducted in Bahteramas Hospital, it is concluded that asphyxia and exclusive breastfeeding practices are known to be the risk factors for febrile seizures in children. It is recommended to identify other risk factors of febrile seizures in the future study as well as how to make the first aid of febrile seizures in children.

REFERENCES

1. Dwienda R Octa et al, 2014. Textbook of neonatal midwivery care, infants/toddlers and pre-school children for midwives, Deepublish, Yogyakarta.
2. Bararah Vera Farah, 2010. *10 Common Diseases Experienced by Toddlers*, (online), (http://health.detik.com/read/2010/06/28/094323/1388049/764/10-penyakit-umum-yang-dialami-balita, 24 February 2016).
3. Lumbantobing, S.M., 2005. *Current Management of Seizures in Children*, FKUI, Jakarta.
4. Indonesian Pediatrician Association, 2006. Consensus on Fever Seizure Management, IDAI Publishing Agency, Jakarta.
5. Wijayahadi Noor, Bahtera Tjipta, Fuadi, 2010. *Risk Factors for Resurrection of Fever Seizures in Children*, Sari Pediatri, Vol. 12, No. 3, October 2010, (online), (http://saripediatri.idai.or.id/pdfile/12-3-2.pdf, 23 Februari 2016).
6. Triana Ani dkk, 2015. *Maternal and Neonatal Emergencies*, Deepublish, Yogyakarta.
7. *Redjeki Sri, 2014. Febrile seizures, (online), (*http://rsudbwi.banyuwangikab.go.id/artikel/detail/1220/kejang-demam.html*, 24 February 2016)*
8. Mahyar Abolfasl, Ayazi Parviz, Fallahi Mazdak, Javadi Amir. 2010. *Risk Factors of ther first febrile seizures in Iranian Children*. International Journal of Pediatrics. Volume 2010, Hindawi Publishing Corporation.
9. Wijayahadi Noor, Bahtera Tjipta, Fuadi, 2010. *Risk Factors for Resurrection of Fever Seizures in Children*, Sari Pediatri, Vol. 12, No. 3, October 2010, (online), (http://saripediatri.idai.or.id/pdfile/12-3-2.pdf, 23 February 2016).
10. Depkes, 2006. *16 Percent of Toddlers in Indonesia Experience Neurodevelopmental Disorders*, (online), (http:www.depkes.go.id/index.php, 24 February 2016).
11. Wong, 2009. *Pediatric Nursing Handbook Volume 1*, EGC, Jakarta.
12. Sodikin, 2012. *Principles of Treatment of Fever in Children*, Pustaka Pelajar, Yogyakarta.
13. Hidayat Alimul Aziz A, 2010. *Quantitative Paradigm Health Research Methods*, Health Book Publishing, Surabaya.
14. Volve JJ, 2001. *Hypoxic-Ischemic Encephalopathy: Biochemical and physiological aspects. Neurology of the New Born.* Edisi ke-4. Philadelphia: WB Saunders Co.
15. Kodrat, Laksono. (2010). *The Power of Breastfeeding & Lactation*. Media Baca, Yogyakarta.
16. Firdinand dkk. 2015. *Incidence of Fever after DTwP-1 Immunization in Children who Receive ASI and Do not Get ASI in Palembang*. Sari Pediatri Vol 17, No 1.

KLASICS
Kendari Journal of Maritime and Holistic Nursing
https://stikesks-kendari.e-journal.id/K
Volume 01 | Number 01 | Januari | 2021
E-ISSN : 2774-6577

Experience of Midwives in Carrying Out Their Role of Assisting Pregnant Women

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Keywords:
Assisting Pregnant Women, Maternal Mortality, Midwife, Role

Abstract. Maternal mortality is often caused by a lack of support which causes problems during pregnancy and delivery that tend to be resolved late. Midwives have a role in implementing assistance and monitoring of maternal and child health. The purpose of this study was to obtain a description of the assistance of pregnant women by midwives in carrying out their roles. This research is a qualitative study with a phenomenological approach involving 5 midwives and 1 public health worker. The results of this study indicate 7 themes including implementers, managers, educators, counselors, collaborators, advocators, and midwifery care. The theme description explains that midwives can carry out their roles well, but there are obstacles during implementation and require support from various parties for cooperation.

INTRODUCTION

Maternal mortality rates throughout the world become difficult to control from year to year due to acute obstetric and postpartum emergencies in the first 24 hours (1–3). The most common causes of maternal death were bleeding with a percentage of 39% and pregnancy anemia by 40%, the rest were eclampsia, infection, and chronic low energy (KEK) (4).

Maternal mortality is unavoidable due to unsolved problems during pregnancy, childbirth, and the puerperium (5). Worldwide, an estimated 830 women die as a result of pregnancy cases (3). Indonesia ranks in the top 5 highest MMR in ASEAN, while Semarang in 2015 was the second city with the highest MMR, then in the following year was third in Central Java(2,6,7).

This incident is one indicator of the lack of health monitoring in pregnant women, especially in traditional communities that have strong traditional beliefs(8). Pregnant women need assistance to be able to adapt well to the birth process (9,10).

Several studies have shown that good assistance from family and health workers can help pregnant women get support for their pregnancy (11–13). This study aims to obtain a description of the assistance of pregnant women by midwives in carrying out their roles.

METHOD

A qualitative study design was used in this study with a phenomenological approach. Participants involved in this study were 6 midwives from the PHC who had not been able to achieve the target of the MCH (Mother and Child Health) program.

The data was collected by conducting a focus group discussion and recorded using a voice recorder device integrated into the Blackberry smartphone, Lenovo, and Cybershot Sony pocket camera. In pocket cameras, the recording is done by taking videos during the FGD. Trustworthiness is carried out by involving external reviewers, conducting member checks on the results of interviews with participants as well as extending contact time with participants, creating and concise descriptions of research results. The triangulation stage is carried out by triangulating theory and triangulating sources through in-depth interviews with participants. The data collected were analyzed using thematic analysis

This research was conducted from August to September 2016 at the Rowosari Public Health Center. Ethical clearance approval from the Health Research Ethics Commission of the Diponegoro Faculty of Medicine number 833/EC/FK-RSDK/VIII/2016.

RESULTS AND DISCUSSION

Respondent Characteristics

Table 1. Characteristics of Respondents

No	Initials	Education	Age (Years)	Working Period (Years)
1.	P1	Diploma in Midwifery	50	25
2.	P2	Diploma in Midwifery	30	1
3.	P3	Diploma in Midwifery	51	27
4.	P4	Diploma in Midwifery	28	2
5.	P5	Diploma in Midwifery	29	2
6.	P6	Master of Health	46	25

Table 1 shows that most of the participants had a Diploma in Midwifery education, with a maximum working period of 25 years and at most over 45 years of age.

Description of the main duties of midwives in assisting pregnant women from the Midwife group is known in seven themes including implementers, managers, educators, counselors, collaborators, advocates, and midwifery care.

The Implementer

The implementing theme is described through two sub-themes, namely ANC by midwives, intranatal by midwives, postpartum by midwives, and neonatal care by midwives. The ANC sub-theme was identified with the pregnancy care focus category. The Midwife group gave the following statements:

> *"Routine checks are by the 10 T protocol, complete laboratory, HbsAg, laboratory examination must go to the PHC, weigh body weight and height, check blood pressure, nutritional status (measure LILA) if there is LILA deficiency, examination of uterine fundal height, fetal presentation and fetal heart rate (FHR), Tetanus Toxoid (TT) immunization if necessary, administration of iron tablets, case management, counseling, class services for pregnant women, classes for pregnant women, providing counseling (counseling) "(Group Midwife)*

The intranatal sub-theme by midwives is known as the category of delivery management. The midwife group gave the following statements:

> *"Intranatal treatment or childbirth is still rare. If it is not possible, usually we will help, evaluate hiss or an opening of more than 4 cm, start using a partograph "(Midwife group)*

The postpartum sub-theme by midwives is known as the focus category of postpartum care. The midwife group gave the following statements:

> *"We also carry out KF (postpartum visit) until the postpartum period is over ... then continued with counseling on the importance of postpartum family planning, blood pressure checks, fundal height, conditions of birth canal wounds, progress on delivery, maternal intake, breastfeeding, breast milk, monitoring of maternal nutrition, counseling, family planning, visits to the patient's home are carried out if there are problems with tension "(Midwife group)*

The sub-theme of neonatal care by midwives is known as the baby care focus category. The midwife group gave the following statements:

> *"Neonatal care is usually seen whether the umbilical cord is dry or not, the general condition of the child, the status of breastfeeding the baby or the ability to breastfeed well or not, the immunization status, counseling at the posyandu about breastfeeding, complementary feeding so you don't rush" (Midwife Group)*

> *"Nursing for newborns...what is studied is usually the baby's condition in general, the umbilical cord, immunization status, body weight, and breastfeeding ... besides that, it also helps with immunization ... Immunization services ... As well as conducting visits... Simultaneously with the visit ... the postpartum mother 4 times... "(P4)*

> "*Nursing for newborns at posyandu, monitoring the baby's condition including immunization, general condition, body weight, breastfeeding or not, the umbilical cord is dry or not ..... Exclusive breastfeeding.... (P5) "*

Midwives carry out their roles well in which all their mandatory roles as an implementer, manager, educator, counselor, collaborator, advocator have been fulfilled. Dhiah Farida Ariyanti agrees with the midwife group that mentoring pregnant women are the authority and responsibility of the midwife (14). The mentoring activities stated by the midwife group are in accordance with the contents of the assistance program for pregnant women formulated in the OSOC (One Student One Client) mentoring program by the Central Java Provincial Health Office(15).

According to the professional service standards of midwives, the role as executor is shown in the implementation of antenatal care, intranatal care, postnatal care, and neonatal care which are included in the provision of primary services (16). The role of the midwife as implementer is to carry out examinations according to 10 T standards such as weighing, measuring LILA, measuring blood pressure, measuring fundal height, calculating Fetal Heart Rate (FHR), fetal presentation, Tetanus Toxoid (TT) immunization, blood booster tablets (Fe tablets), laboratory examinations, case management or handling, pregnancy classes and counseling. This is reinforced by research conducted by Lisa Marniyati regarding ANC services which refers to 10 T checks according to antenatal care service standards according to integrated antenatal care guidelines and midwife professional standards (16-18).

Intranatal services for PHC that do not yet have inpatient facilities and delivery rooms are in the form of providing delivery management by monitoring the progress of hiss (contraction) to decide the action to be taken. This action is to refer pregnant women and manage deliveries at the PHC if conditions are not possible for referrals. However, the incidence of delivery at outpatient PHC is very rare. The obstacle to the unavailability of delivery room facilities

is the main factor that midwives who work in non-inpatient health centers are unable to carry out assistance for pregnant women properly, especially in obstetric care for childbirth and postpartum midwifery care.

This situation is due to the fact that midwives in non-inpatient health centers do not have main or supporting tasks in handling delivery and postpartum care, only postpartum care visit services (first - third postpartum visit). The PPSDM Agency explains that delivery care is carried out in the concept of assisting deliveries to be referred to a more complete health facility (19). This contradicts the professional standards of midwives which explain that midwives are expected to be able to provide high-quality delivery or intranatal care while still paying attention to local cultural wisdom during labor, leading to safe and clean delivery, and being able to handle emergency conditions (16).

The Manager

The management theme is described through the MCH administration category. The Midwife group provided the following statements:

> *"Completing the administrative task of midwifery reports, reports on monitoring local areas, data collection of high-risk pregnant women in these areas, data collection for pregnant women, we work with cadres (Midwife group).*

The role of the manager is shown by the activity of midwives in managing MCH statistics related to reports and administrative data related to MCH cases at the PHC. Through their role as managers, midwives can also act as planners in handling clients of pregnant women, especially high-risk pregnant women. This role is in accordance with one of the professional standards of a midwife in midwifery services, such as administrative and management standards that already have guidelines, service standards, and regular procedures (16).

The Educator

Educator themes are described through categories of providing information. The midwife group stated the category of society in the statement, as follows:

> *"Refreshing cadres to provide basic knowledge of monitoring pregnant women motivates every pregnant woman. There is also a response from the community, especially the families of pregnant women to take them to health services "(Midwife group)*

The role of midwives as educators is here as a provider of information to the community (patient's family) as well as academics or students who carry out education and research. Midwives play a role in educating families, especially as supporting mothers, which is in line with Nurul aeni's research on the importance of providing information to families, especially husbands or people who live in the same house, and research by Nuraeni et al about the importance of education for couples (20, 21).

The Counsellor

The counsellor theme is described through the health service briefing categories. The midwife group gave the following statements:

> *"If pregnant women are found for the first time, they are advised to go to the PHC." (Midwife group)*

The role of the midwife as a counselor in mentoring is shown in community guidance activities to obtain health services. Midwives motivate pregnant women to carry out antenatal care at the PHC. Besides, midwives also provide counseling on family planning and breastfeeding. According to research by Nuning Arsyaningsih, et al, health education or counseling is a very important element for clients, besides it will affect the quality of the interaction between midwives and

patients, which can lead to an interest in repeated visits (22).

The Collaborator

The collaborator theme is described by the category referral by midwives. The midwife group gave the following statements:

> *"If there are risk factors or risks, we will immediately refer to them. Also if there is refer to it. We have to pay attention to referrals, give referrals to general practitioners, we refer to them according to the existing protocol. If there is a labor emergency and it is no longer possible to refer to it, the midwife will supervise and assist the delivery "(Midwife group)*
>
> *"Pregnant women who have risk factors must give birth in the hospital ..." (P4)*
>
> *"... We try to refer patients to higher health facilities ... if they ask for medicine, they will be referred here ...." (P5)*
>
> *"... if there is an emergency (emergency) childbirth ... the average person who accompanies (refers) the midwife ..." (P6)*

Collaboration is a form of midwifery service and the level carried out by midwives is horizontal referrals, while vertical referrals are approved by the PHC doctor (midwife as a companion for the patient) (16, 23). As collaborators, midwives apply a referral system in 3 things as follows: case finding of emergency (emergency), pregnant women with risk factors, and management referrals.

The Advocator

Advocate themes are described through the safety category of pregnant women. The Midwife group made the statement, as follows:

> *"So, when referring patients, we must pay attention to the requirements for referring patients" (Midwife group)*

The role of the midwife as an advocate is demonstrated in the referral procedure that involves multiple professions (nurses and doctors) and the completeness of the terms of reference for the safety of mothers and babies. Refer which is carried out by midwives is a vertical referral after obtaining PHC's doctor approval (23). According to Indarwati's research on National Referral Standards, midwives have started to carry out reconciliation using these standards although there are still shortcomings and obstacles (24).

The Midwifery Care

The theme of midwifery care in assisting pregnant women is described through categories of obligations, mentoring activities, pregnancy assistants and obstacles to midwives. The category of obligations expressed by the midwives group in the statement is as follows:

> *"As a midwife, it is our duty and responsibility if there are pregnant women, they must always accompany them as midwives at PHC. As well as still suggesting that pregnant women during childbirth must be in the hospital, not necessarily in an independent practice midwife because it is not the authority of an independent practicing midwife.)*

The category of mentoring activities is expressed by the midwife group in the statement, as follows:

> *". All pregnant women are provided with services. If we carry out a posyandu, we provide counseling, services, provisioning, examinations, and provide monitoring ... The care of pregnant women up to the postpartum period ... strategy, not checking things. "(Midwife group)*

The categories of other pregnancy assistants were expressed by the midwives' group in the following statements:

> *"We also approach the cadre women who have actually taken part, depending on the coordination of how the cadres want ...*

Gasurkesh also carries out assistance for pregnant women ....." (Midwife group)

"... Cadre members who participate in monitoring and there is usually a routine meeting of cadres who report the results to us too" (P5)

"...there are cadres ... These cadres meet every day or almost every day ... the involvement of PHC's doctors ...the person in charge of all activities both at KIA and at BP is by a doctor ..... Gasurkesh is to monitor pregnant women with certain targets.... "(P6)

Midwives who serve mentoring also experience problems. This is known from the statement of the midwife group in the theme of Midwifery Care for pregnant women assistance with the sub-theme of mentoring coverage and the category of obstacle midwives. The midwife's obstacle category was expressed by the midwife group in the statement, as follows:

"The implementation of posyandu services outside PHC is indeed constrained by the limited space and equipment. On the other hand, technology is getting more advanced, they can search on google and they think that when the obstetrician checks here, the examination is complete so sometimes they don't open the door for us. Another obstacle is the problem of human resources and demographics, the house is far away. "(Midwife group)

"... Sometimes mothers like to find information on the internet (technology) ... gathering pregnant women is rather difficult (limited) ..." (P4)

"Sometimes pregnant women don't want to have themselves checked out because pregnancy is considered a common occurrence, especially if their house is far from PHC" (P5)

The government in an effort to reduce MMR has provided assistance to midwives in the form of mentoring programs by doctors, cadres, and gasurkesh. Mochtar said that pregnant women should be able to get pregnancy assistance services by general practitioners and obstetricians (25). Colti Sist Terbangi, et al in their research explained that assistance by cadres can trigger a mother's activity in maintaining maternal and child health (26). Gasurkes has a working range of the MCH program, including data collection and assistance to all pregnant women in their work area, assisting postpartum mothers, providing MCH counselling, filling pregnant women cohorts, filling delivery bags, ANC guidebooks, and reporting cases of maternal mortality in the coverage area of their work (27).

Midwives have problems in implementing the program. These constraints include the problem of distant patient homes, technological advances that make patients reluctant to visit, the limited availability of infrastructure during posyandu, the patient does not open the door when conducting a home visit, and the status of having checked with an ob-gyn specialist as an inhibiting factor in assisting pregnant women.

Demographic problems such as affordability of health facilities play a role in the success of the assistance program for pregnant women, especially ANC visits, as in the research of Rahma Erlina, et al(28). The effect of technology revealed by the midwife group is in line with Intyaswati's research, namely, currently, pregnant women like to seek information from electronic media including from the internet. (29) Patients' rejection of midwives who carry out home visits should not occur because according to Mediana Dwidiyanti's research, patients can participate become partners in health administration (30). Nuning Arsyaningsih's statement, that clients tend to choose health service places with more complete facilities and infrastructure strengthens the opinion of the midwife group regarding pregnant women who are reluctant to come to the posyandu because of limited equipment (22).

CONCLUSIONS

The role of assisting pregnant women is the main task and task of supporting midwives in both Outpatient and Inpatient PHCs. Obstacles faced by midwives include the problem of the patient's home is far from PHC, technological advances that make patients reluctant to visit PHC, the limited availability of infrastructure, the patient does not open the door when conducting a home visit. Status has been checked by a gynecologist as one of the inhibiting factors for pregnant women to go to the PHC because they feel they have been monitored enough. Assistance from the government in an effort to reduce MMR in the form of participation by doctors, cadres, and GASURKESH.

REFFERENCES

1. Acharya AS, Kaur R, Prasuna JG, Rasheed N. Making Pregnancy Safer - Birth Readiness and Study Readiness Among Antenatal Women Present at the Primary Health Center, Delhi. J India Community Med. 2015; 40 (2): 127–134.
2. WHO. Data on maternal mortality ratio by country [Internet]. 2013 [cited 2015 Aug 31]. Available from: http://apps.who.int/gho/data/node.main.15
3. WHO. Maternal and reproductive health [Internet]. Global Health Observatory (GHO) data. 2015 [cited 2015 Aug 31]. Available from: http://www.who.int/gho/maternal_health/en/
4. Dewi YI, Salti D. Relationship between Knowledge Level and Attitude of TBAs, Towards Delivery Aid Actions. J Ners Indones. 2012; Vol. 2, No: 143–50.
5. WHO. Maternal death [Internet]. Media center. 2015 [cited 2016 Jun 10]. Available from: http://www.who.int/mediacentre/factsheets/fs348/en/
6. Semarang City Health Office. Urgent! Pregnant women must be accompanied by [Internet]. Semarang City Health Office Official Portal. 2015 [cited 2016 Feb 20]. Available from: http://www.dinkes-kotasemarang.go.id/?p=kaktif_mod&j=lihat&id=273
7. Central Java Provincial Health Office. Health Pocket Book for the 1st quarter of 2016 [Internet]. Semarang: Central Java Provincial Health Office website; 2016. Available from: http://www.dinkesjatengprov.go.id/v2015/dokumen/buku_saku_tw1_2016/flip/#p=1
8. Devy SRM, Hakimi M, Prabandari YS, Rafsandjani D, Haryanto S. Pseudo Participation of Pregnant Women at Posyandu. J Public Health. 2013; Vol. 7, No: 460–5.
9. Indriastuti D, Namuwali D. Beneficial effects of doula support on pregnancy. In: Java International Conference. 2015.
10. Mahin N, Sahar G, Homeyra V, Mohammad F. Perceived social support and its relationship with several demographic characteristics of Primigravida pregnant women. Midwifery Int J Nurs. 2015; 7 (9): 141–5.
11. Arifin A, Kundre R, Rompas S. The Relationship between Family Support and Anxiety of Pregnant Women Facing the Delivery Process at Budilatama Health Center, Gadung District, Buol District, Central Sulawesi Province. eJournal of Nursing (e-Kp). 2015; 3 (May 2015).
12. Udofia EA, Akwaowo CD. Pregnancy and after what a woman wants from her partner - listen to women in Uyo, Nigeria. J Psychosom Obstet Gynaecol. 2012; 33 (3): 112–9.
13. Ramadani M, Gusta D, Nursal A, Ramli L. Role of Health Workers and Families in Teenage Pregnancy. Role of Health Workers and Families in Teen

Pregnancy. J Public Health. 2014; 10 (94): 87–92.
14. Ariyanti DF. Analysis of the Quality of Antenatal Services by Midwives at Purbalingga District Health Center. Master of Public Health Sciences; 2010.
15. Central Java Provincial Health Office. Guidelines for the Implementation of Maternity Assistance for One Student One Client (OSOC): For Midwifery Students. Semarang: Central Java Provincial Health Office; 2015.
16. Ministry of Health RI. Decree of the Minister of Health of the Republic of Indonesia. Number: 369 / MENKES / SKII / 2007 concerning Midwife Professional Standards. Indonesia; 2008.
17. Ministry of Health, Republic of Indonesia. Guidelines for integrated antenatal care. Jakarta: Director General of Community Health Development; 2010.
18. Marniyati L, Saleh I, Soebyakto BB. Quality Antenatal Services in Improving the Detection of High Risk in Pregnant Women by Health Workers at Sako, Sosial, Sei Baung and Sei Selincah Puskesmas in Palembang. Introduction to be a participant in the National Health Insurance of the Propi Government. J Vocational and Health. 2016; 3 (1): 355–62.
19. PPSDM Health Agency. Manual Book 1 Planning for Health HR Needs Based on the Health Workload Analysis Method (ABK Kes). Jakarta: Indonesian Ministry of Health; 2015.
20. Nuraeni, Soepardan S, Bahiyatun, Soewondo A. The Effect of Husband's Counseling and Assistance on the Success of Breastfeeding Mothers in Giving Colustrum. J Midwifery. 2014; 3 (6): 45–9.
21. Nurul Aeni. Risk Factors for Maternal Death. J Public Health. 2013; 7 (10): 453–9.
22. Arsyaningsih N, Suhartono, Suherni T. Analysis of factors affecting the quality of family planning counseling services for intrauterine contraceptives by midwives in the work area of the wiradesa puskesmas, pekalongan district in 2013. J Midwifery. 2014; 3 (6): 17–29.
23. Minister of Health RI. Regulation of the Minister of Health of the Republic of Indonesia Number 001 of 2012 concerning Individual Health Service Referral Systems. 2012 p. 1–10.
24. Indarwati, Wahyuni. Implementation of Labor Referral and Constraints Faced. INFOKES. 2014; 4 (1): 1–12.
25. Mochtar R. Synopsis of Obstetrics: Obstetrics, Physiology, Obstetrics and Pathology. Jakarta: EGC; 2011.
26. Sistentuki C, Nurhayati S, Suratman. Factors Affecting the Role of Cadres in the Use of Maternal and Child Health Books. J Kesehat Masy [Internet]. 2013; 8 (2): 99–105. Available from: http://journal.unnes.ac.id/nju/index.php/kemas/article/view/2632
27. Armaya P, Sriatmi A, Arso SP. Performance Analysis of Maternal and Child Health Survey Program Personnel (Gasurkes) in Semarang City. J Public Health FKM UNDIP. 2016; 4 (4): 112–21.
28. Erli , Larasati T, Kurniawan B. Factors Influencing Pregnant Women on Pregnancy Check-Up Visits at Long Inpatient Puskesmas Bandar Lampung. Med J Lampung Univ. 2013; 2 (4): 29–34.
29. Intyaswati, Disturb AH. Description of Knowledge Level of Pregnant Women About Pregnant Exercise at Bkia William Booth Hospital Surabaya. portal garuda. 2014; 3 (1).
30. Dwidiyanti M. Ability of Partners in Health for Chronic Illness Patients and Related Factors. In: International Seminar “Current Issues of Nursing Quality in Clinical Practice, Education, and Research. Semarang: Nursing Study Program Health Polytechnic Semarang; 2016.



KLASICS

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