

Volume 1, Number 1 2022

e-issn:

Public Health Sebelas April Journal

PHSAJ



Universitas Sebelas April
Program Studi Ilmu Kesehatan Masyarakat
Editorial Office: Jl. Angrek Situ no. 19, Sumedang, Indonesia 45323
ejournal.unsap.ac.id

PHSAJ - Public Health Sebelas April Journal

Volume 1, No. 1, Mei 2022

<https://ejournal.unsap.ac.id/index.php/phsaj>

FACTORS RELATED TO WORK FATIGUE ON TRUCK DRIVERS AT PT KORDON PUTRA IN SUMEDANG REGENCY IN 2022

Dadang Sulaeman, Rizki Fauzi (pp. 1-6)

THE STRATEGY OF HEALTH OFFICE IN EFFORTS TO OVERCOME STUNTING PREVALENCE IN TODDLERS IN SUMEDANG REGENCY IN 2022

Dini Afriani, Dessy Budianto (pp. 7-12)

THE RELATIONSHIP BETWEEN MOTHER KNOWLEDGE AND ATTITUDES TOWARDS BASIC IMMUNIZATION COMPLETENESS IN INFANTS IN CIMALAKA DISTRICT IN 2022

Dini Justian, Amelia Siti Nurjanah (pp. 13-20)

RELATIONSHIP BETWEEN ANTENATAL CARE VISITS AND LBW WITH STUNTING INCIDENCE IN TODDLERS AGED 24-59 MONTHS IN THE WORKING AREA OF THE SITURAJA HEALTH CENTER SUMEDANG 2022

Ely Walimah, Dila Novita Rahma (pp. 21-29)

THE EFFECT OF STRESS LEVEL ON MENSTRUAL CYCLE IN FINAL STUDENTS AT THE FACULTY OF HEALTH SCIENCES UNIVERSITY OF APRIL ELEMENT

Evi Sonjati, Dinda Noviana Hidayat (pp. 30-38)

THE RELATIONSHIP BETWEEN PARENTING AND ECONOMIC LEVEL WITH STUNTING INCIDENCE IN TODDLERS AT SITURAJA HEALTH CENTER SUMEDANG REGENCY IN 2022

Gita Arisara, Rizal Andrian Restu (pp. 39 – 45)

ANALYSIS OF WASTE DISPOSAL PROCESS MANAGEMENT IN THE CIBEREUM TPA OF SUMEDANG REGENCY IN 2022: A QUALITATIVE STUDY

Hana Fitria Andayani, Dedeh Widaningsih Ramdani (pp. 46 - 49)

FACTORS RELATED TO EARLY MARRIAGE IN YOUNG WOMEN IN CIMALAKA DISTRICT SUMEDANG 2022

Hilman Taufik S, Siti Nuryani (pp. 50 – 56)

THE RELATIONSHIP BETWEEN KNOWLEDGE AND ATTITUDES WITH THE PRACTICE OF CLEAN AND HEALTHY LIVING IN RANCAGOONG TANJUNGWANGI VILLAGE, TANJUNGMEDAR DISTRICT, SUMEDANG REGENCY IN 2022

Sherly Marcelina, Iis Komala (pp. 57-64)

THE RELATIONSHIP BETWEEN QUALITY OF HEALTH SERVICES AND INTEREST IN PATIENT REVISIT AT TANJUNGSARI INPATIENT HEALTH CENTER IN 2022

Sutisna, Herawati (pp. 65 – 71)

RELATIONSHIP BETWEEN PHYSICAL ACTIVITY AND DIET WITH DYSMENORRHOEA DEGREE ON STUDENTS OF THE FACULTY OF HEALTH SCIENCES SEBELAS APRIL UNIVERSITY DURING COVID 19 PANDEMIC IN 2022

Witri Dewi Mentari, Febri Nurwanti (pp. 72 – 77)

FACTORS RELATED TO WORK FATIGUE ON TRUCK DRIVERS AT PT KORDON PUTRA IN SUMEDANG REGENCY IN 2022

Dadang Sulaeman¹, Rizki Fauzi²
Public Health Science Study Program
Faculty of Health Science, Sebelas April University
Email: rf240299@gmail.com

Article Info

Article history:

Received April 10, 2022
Revised April 03, 2022
Accepted Mei 09, 2022

Keywords:

Truck Driver
Work Fatigue
Workload
Work Safety

ABSTRACT

Fatigue is caused by several factors, namely workload, work capacity, and additional burden due to the work environment. Individual factors on fatigue such as age, workload, and nutritional status have a strong influence on causing fatigue. The purpose of this study was to determine the relationship between age, workload, nutritional status with work fatigue on truck drivers at PT Kordon Putra, Sumedang Regency. This research method used quantitative research with a cross sectional approach. The population in this study were 140 truck driver employees and the research sample was 58 truck driver. The instrument used was distributing questionnaires to respondents. Data were analyzed using chi square. The results of this study found that there was a relationship between age ($p = 0.000$) with work fatigue, workload ($p = 0.000$) with work fatigue, nutritional status ($p = 0.000$) with work fatigue. It is hoped that PT Kordon Putra will provide more education to truck driver employees and to minimize the safety of truck driver employees when driving trucks.



Copyright © 2022 PHSAJ. All rights reserved.

Corresponding Author:

Rizki Fauzi,
Public Health Science Study Program,
Faculty of Health Science, Sebelas April University,
Jl. Cipadung No.54, Kotakaler, Sumedang Utara, Sumedang, Jawa Barat 45621, Indonesia.
Email: rf240299@gmail.com.

1. INTRODUCTION

Land transportation is one of the main infrastructures for the economy in Indonesia (Daulay, 2018; in Raihanil 2020). Many people in Indonesia or in the world who use machine transportation to carry out their daily activities. The means of transportation such as two wheels or four wheels. Likewise with the delivery of goods between islands and between provinces. Many individuals or goods companies who want to deliver their manufactured goods to their destination use the services of a delivery company or individual services such as using a truck which of course uses a driver (Depari, 2016, in Raihanil 2020).

Truck drivers as drivers according to the Law of the Republic of Indonesia Number 22 of 2009 concerning road transport traffic are people who drive motorized vehicles on the road who already have a driving license (SIM). The driver's license must match the type of motorized vehicle being driven. And based on the Law of the Republic of Indonesia Number 22 of 2009 letter c market 80 concerning road traffic and public transportation, SIM B II is valid for drivers of heavy equipment vehicles, towing vehicles, or motorized vehicles by pulling a patch carriage or individual trailer with a weight that is allowed for patch carriage or trailer of more than 1,000 kilograms. As a professional driver, you must have the following characteristics: have knowledge of the correct or proper driving methods and techniques, have high alertness when driving, have vision and vision in all directions and far ahead, have the ability to make quick and

accurate decisions, have expertise and skills as a learning process and driving experience. In working truck drivers as ordinary people feel tired (Handayani, 2017 in Raihanil 2020).

Every company that uses the services of a driver must be able to provide an understanding of driving in order to reduce the high number of traffic accidents that can cause death. Traffic accidents are one of the leading causes of death in the world. In 2010, injuries due to traffic accidents killed at least 1.24 million annually in the world, meaning that there are about 3,397 people die every day worldwide due to traffic accidents (WHO, 2017).

Fatigue is also one of the causes of Work Accidents in the Transportation Sector, as can be seen in the results of a study conducted in Peru by Castrodan Loureiro in 2004 which said that drivers who lack sleep time will feel tired and very sleepy (eyes fallen shut) while driving. Based on statistical data from the National Highway Traffic Safety Administration, 20% of all traffic accidents are caused by driver fatigue. Drowsiness while driving causes at least 100,000 accidents per year in the United States resulting in 40,000 minor accidents and 1550 serious accidents (in Raihanil 2020).

According to Law no. 22 of 2009 concerning Road Traffic and Transportation states that drivers are required to drive their vehicles fairly and with high concentration because they have fast and precise coordination between the eyes, hands, feet, and brain that stay focused for hours so that driving is a very difficult job. risk of experiencing fatigue and various other disorders.

PT. KDP Kordon Putra is located at Cibereum Kulon, Cimalaka District, Sumedang Regency as a business entity engaged in the supply and distribution of building materials of the type of milled sand or stone ash, always using trucks for its marketing operations. In meeting the needs of its consumers PT KDP has sufficient land for industrial raw materials consisting of stone and andesite sand, for marketing PT KDP does marketing outside Sumedang including: Majalengka, Bandung, Indramayu, Subang, and outside West Java with a fleet of dump trucks which are in PT KDP are 101 units and 140 truck drivers. Why are there more drivers, because the operating hours alternate with more drivers.

Based on a preliminary study in May 2022 by researchers at a sand mining company in Sumedang Regency on 5 PT KDP employees who work as truck drivers, it can be concluded that on average they experience fatigue when driving badly. This fatigue is caused by cross-city driving which takes a very long time and the intensity of the work time is relatively long. So when in the field a lot of complaints from the drivers. Because the working time is up to 5 hours more so it is relatively long, there are often cases of accidents involving truck drivers at PT KDP Kordon Putra. The age variable is that workers aged from 20-50 years are not at risk and from 55 years and above are at risk, so it can be said that the highest fatigue occurs at the age of 55 years and over. Various physical/biological and social problems will appear at risky age as an aging process or degenerative disease that appears along with a person's aging. Aging is a natural process that will be experienced by every individual. The workload variable is a difference between the capacity or ability of workers and the demands of the work that will experience fatigue due to the workload because in working using physical, each has a different level of loading. The nutritional status variable is an individual description as a result of daily nutritional intake. . Nutritional status can be known through the measurement of several parameters, then the results of these measurements are compared with standards or references. There are often cases of accidents involving truck drivers at PT Kordon Putra. Accident cases that have occurred at PT Kordon Putra Kab. This Sumedang numbered more than 10 cases which were dominated by truck drivers.

2. METHOD

This research uses quantitative research methods. By using this research design using cross sectional. The independent variables in this study are factors related to work fatigue. The dependent variable in this study was work fatigue on PT Kordon Putra truck drivers in Sumedang Regency. The population in this study were all 140 PT Kordon Putra truck drivers in Sumedang Regency. In this study, sampling using the formula according to Slovin. Taking into account the time and effort that tends to be in terms of an error tolerance level of 10%, then the number of samples obtained from the total population are 58 truck drivers. The sampling technique used in this study is a random sampling technique, and Accidental Sampling.

The questionnaires used consist of questionnaires that have been used by other researchers and have been declared valid and standard questionnaires. The questionnaire consists of 4 variables that will be examined: work fatigue with tired and not tired, light and heavy workload, nutritional status using the measurement of BMI (Body Mass Index) TB/BB, while age .20-50 years is not at risk 55 over the year at risk.

Because the researcher used a standardized questionnaire, namely the results of Alfiatin Eka Andriani's research at STIKES Bhakti Husada Mulia Madiun 2021, the validity and reliability tests were not carried out anymore, because this questionnaire was considered valid and understandable and could be used and in accordance with what you wanted to ask. to the respondent.

3. RESULTS AND DISCUSSION

3.1. Results

3.1.1 Univariate Analysis

Table 3.1 Frequency Distribution of Respondents on Age at PT Kordon Putra in 2022

Age	Frequency	Percent%
No Risk	52	89,7
Risk	6	10,3
Total	58	100%

Based on table 3.1 it can be concluded that the highest frequency based on age is in the non-risk group with a total of 52 people (89.7%)

Table 3.2 Frequency Distribution of Respondents on Workload at PT Kordon Putra in 2022

Workload	Frequency	Percent%
Light	14	24,1
Heavy	44	75,9
Total	58	100%

Based on table 3.2 it can be concluded that the highest frequency based on workload is in the heavy group with a total of 44 people (75.9%)

Table 3.3 Frequency Distribution of Respondents on Nutritional Status at PT Kordon Putra in 2022

Nutritional status	Frequency	Percent%
Normal	20	34,5
Fat	8	13,8
Very Fat	30	51,7
Total	58	100%

Based on table 3.3 it can be concluded that the highest frequency based on nutritional status is in the very obese group with a total of 30 people (51.7%)

Table 3.4 Frequency Distribution of Respondents on Work Fatigue at PT Kordon Putra in 2022

Work Fatigue	Frequency	Percent(%)
Tired	44	75,9
No Tired	14	24,1
Total	58	100%

Based on table 3.4 it can be concluded that the highest frequency based on work fatigue is in the tired group with a total of 44 people (75.9%).

3.1.2 Bivariate Analysis

Table 3.1.1 Relationship between Age and Work Fatigue on Truck Drivers at PT Kordon Putra, Sumedang Regency in 2022

Age	Work Fatigue				Total		P Value*
	Tired		No Tired		F	%	
	F	%	F	%			
No	44	39,4%	8	12,6%	52	89,7%	0,000
Risak							
Risk	0	0%	6	1,4%	6	10,3%	
Total	44	75,9%	14	24,1%	58	100%	

Based on table 3.1.1 regarding the relationship between age and work fatigue on truck drivers at PT Kordon Putra in Sumedang Regency. It was found that respondents with age at risk, there were 6 respondents (1.4%) in the category of work fatigue not tired. From the group of respondents with age not at risk, there are 44 respondents (39.4%) in the category of experiencing fatigue and 8 respondents (12.6%) in the category of

not experiencing fatigue. The results of the Chi-Square test ($p = 0.000$) stated that there was a relationship between age and work fatigue for truck drivers at PT Kordon Putra, Sumedang Regency.

Table 3.1.2 Table 3.2.2 Relationship between Workload and Work Fatigue for Truck Drivers at PT Kordon Putra, Sumedang Regency in 2022

Workload	Work Fatigue				Total		P Value*
	Lelah		Tidak Lelah		F	%	
	F	%	F	%			
Light	0	0%	14	3,4%	14	89,7%	0,000
Heavy	44	33,4%	0	0%	44	10,3%	
Total	44	75,9%	14	24,1%	58	100%	

Based on table 3.2.2 regarding the relationship between workload and work fatigue on truck drivers at PT Kordon Putra in Sumedang Regency. It was found that the respondents in the light workload category, there were 14 respondents (3.4%) in the work fatigue category who did not feel tired. From the group of respondents in the heavy workload category, there were 44 respondents (33.4%) in the work fatigue category who experienced fatigue. The results of the Chi-Square test ($p = 0.000$) stated that there was a relationship between workload and work fatigue for truck drivers at PT Kordon Putra, Sumedang Regency.

Table 3.1.3 Relationship between Nutritional Status and Work Fatigue for Truck Drivers at PT Kordon Putra, Sumedang Regency in 2022

Nutritional status	Work Fatigue				Total		P Value*
	Tired		No Tired		F	%	
	F	%	F	%			
Normal	20	15,2%	0	0%	20	34,5%	0.000
Fat	8	6,1%	0	0%	8	13,8%	
Very Fat	16	22,8%	14	7,2%	30	51,7%	
Total	44	75,9%	14	24,1%	58	100%	

Based on table 3.1.3 regarding the relationship between nutritional status and work fatigue on truck drivers at PT Kordon Putra in Sumedang Regency. It was found that the respondents in the normal category, there were 20 respondents (15.2%) in the work fatigue category who experienced fatigue. From the group of respondents with the category of obese nutritional status, there were 8 respondents (6.1%) in the work fatigue category who experienced fatigue. From the group of respondents with very fat nutritional status category, there were 16 respondents (22.8%) in the work fatigue category who experienced fatigue and 14 respondents (7.2%) in the work fatigue category did not experience fatigue. The results of the Chi-Square test ($p = 0.000$) stated that there was a relationship between nutritional status and work fatigue for truck drivers at PT Kordon Putra, Sumedang Regency.

3.2. Discussion

3.2.1 . The Relationship between Age and Work Fatigue

Based on the results of statistical tests obtained p value of 0.000 and it can be concluded that there is a significant relationship between age and work fatigue on truck drivers at PT Kordon Putra in Sumedang Regency.

According to the theory of Suma'mur (1994) increasing age will be followed by a process of organ degeneration, so that in this case the organ's ability will decrease.

Age Relating to performance because increasing age will be followed by a process of degeneration of the organ so that in this case the ability of the organ will decrease. With a decrease in the ability of organs, this will cause the workforce to experience fatigue more easily. The condition, ability and capacity of the human body will decrease. The older you get, the more prone you are to fatigue. Aging will result in gradual damage to the physiological, chyrcardian, and sleep systems. A person at the age of 40-49 years, the condition of decline begins to be seen from the discovery of a diagnosis of disease and at the age of 50-55 years a person's work capacity will decrease. Fatigue will be felt more prominent with age. This is due to a decrease and muscle endurance, so fatigue will increase. (Budiman, A, et al, 2016)

From age it can be seen that there are several physical capacities such as vision, hearing and decreased reaction speed. Most physical performance peaks in their mid-20s and then declines with age. WHO states the age limit for the elderly is 60 years and over. While in Indonesia 55 years is considered the limit for old age.

3.2.2 The Relationship between Workload and Work Fatigue

Based on the results of statistical tests obtained p value of 0.000 and it can be concluded that there is a significant relationship between workload and work fatigue on truck drivers at PT Kordon Putra in Sumedang Regency.

According to Setyawati's theory (2010) that the workload given to workers needs to be adjusted to the psychological and physical abilities of the workers concerned, travel conditions, travel time from place to work which is as minimal as possible and as safe as possible affects occupational health conditions in general and fatigue. special work.

Excessive physical activity as well as tasks and workloads that pile up are also a problem in work for humans. Physical activity and tasks and workloads that accumulate which are followed by human inability to adjust can result in psychological problems for the workforce. The psychological problem is stress, due to workers who are not able to adjust to the tasks and workload in their work. Heavy workload conditions such as pushing or pulling, as well as lifting wood or other objects over long distances can affect work fatigue as many as (53%) and as many as (90%) workers who every day carry out excessive pulling and pushing activities. Then the pulse will immediately change in rhythm with changes in loading, whether originating from mechanical, physical, or chemical loading, causing changes in heart rhythm.

3.2.3 Relationship between Nutritional Status and Work Fatigue

Based on the results of statistical tests obtained p value of 0.000 and it can be concluded that there is a significant relationship between nutritional status and work fatigue on truck drivers at PT Kordon Putra in Sumedang Regency.

According to the theory of Budiono, et al (2003) nutritional status is one of the causes of fatigue. A worker with good nutritional status will have better body resistance and work capacity, while a worker with poor nutritional status will have poor body resistance and work capacity as well.

he problem of malnutrition or excess nutrition in adults (aged 18 years and over) is an important problem, because apart from having the risk of certain diseases, it can also affect work productivity. Due to lack of nutrients, the stored nutrients in the body will be used to meet needs. If this continues for a long time, then nutrient stores will be depleted and tissue deterioration occurs, by increasing nutrient deficiency, biochemical and nutrient changes in the blood appear low, in the form of low Hb levels, serum vitamin A and carotene. There is an increase in several metabolic products such as lactic and pyruvic acid in thiamine deficiency. If this situation lasts a long time, it will result in changes in body functions that are marked, namely weakness, dizziness, fatigue, shortness of breath and others. (Supariasa, et al., 2002).

A truck driver with good nutrition will have a better working capacity and endurance, and vice versa. In a state of poor nutrition with a heavy workload, it will interfere with work and reduce efficiency and body resistance so that it is easy to contract diseases and accelerate the onset of fatigue.

4. CONCLUSION

From the results of the study "Factors Associated with Work Fatigue on PT Kordon Putra Truck Drivers in Sumedang Regency in 2022" it can be concluded as follows:

1. From the factors of work fatigue in the age group of 58 respondents with the highest frequency in the no-risk group as many as 52 respondents (89.7%), in the workload group of 58 respondents with the highest frequency in the heavy group as many as 44 respondents (75, 9%), in the nutritional status group of 58 respondents with the highest frequency in the very obese group as many as 30 respondents (51.7%), in the work fatigue group from 58 respondents with the highest frequency in the tired group as many as 44 respondents (75.9%).
2. There is a relationship between age and work fatigue for truck drivers at PT Kordon Putra, Sumedang Regency.
3. There is a relationship between workload and work fatigue for truck drivers at PT Kordon Putra, Sumedang Regency.
4. There is a relationship between nutritional status and work fatigue on truck drivers at PT Kordon Putra, Sumedang Regency.

REFERENCES

- Adytama, S., & Muliawan, P. (2020). Kelelahan Kerja Dan Determinan Pada Pengemudi Minibus Antar Provinsi Jawa-Bali Tahun 2019. *Health*
- Atiqoh, J., Wahyuni, I., & Lestantyo, D. (2014). Faktor-faktor yang berhubungan dengan kelelahan kerja pada pekerja konveksi bagian penjahitan di CV. Aneka Garment Gunungpati Semarang. *Jurnal Kesehatan Masyarakat (Undip)*, 2(2), 119-126.
- Azhar, S. 2021. Skripsi, Faktor-Faktor Yang Berhubungan Dengan Praktik Safety Driving Pada Pengemudi Truk Di Pt Kdp Kabupaten Sumedang. Stikes
- Belia, R. (2018). Faktor-Faktor Yang Mempengaruhi Kelelahan Kerja Pada Pengemudi Bus Primajasa Trayek Balaraja-Kampung Rambutan Tahun 2018. *Esa Unggul*
- Budiman, A., Husaini, H., & Arifin, S. (2016). Hubungan antara umur dan indeks beban kerja dengan kelelahan pada pekerja di pt. karias tabing kencana. *Jurnal Berkala Kesehatan*, 1(2), 121-129
- Budiono, dkk. 2003. Kelelahan (Fatigue) Pada Tenaga Kerja. *Bunga Rampai Hiperkes dan Keselamatan Kerja Edisi Ke-2*. Semarang: Universitas Diponegoro
- Daulay, S. A. D., & Septiawati, D. (2018). Analisis Faktor Risiko Kelelahan Supir Bus Antar Kota Antar Provinsi (Akap) Di Perusahaan Otobus (PO) Antar Lintas Sumatera (Als) Kota Palembang Tahun 2018 (Doctoral dissertation, Sriwijaya University).
- Depnakertrans. Undang-undang No 13 Tahun 2003 Tentang Ketenagakerjaan. Jakarta: Kementerian Tenaga Kerja; 2003
- Dio Dirgayudha, 2014, *Faktor-faktor yang Berpengaruh Terhadap Kelelahan Kerja pada Pembuat Tahi di Wilayah Ciputat dan Ciputat Timur Tahun 2014*, KESMAS Vol. 3, No. 3, November 2014.
- Eraliesia F, 2009, *Hubungan Faktor Individu dengan Kelelahan Kerja pada Tenaga Kerja Bongkar Muat di Pelabuhan Tapaktuan Kecamatan Tapaktuan Kabupaten Aceh Selatan Tahun 2008*, Jurnal Kesehatan Masyarakat Vol.2, No. 3
- Kusgiyanto, W., Suroto, S., & Ekawati, E. (2017). Analisis Hubungan Beban Kerja Fisik, Masa Kerja, Usia, Dan Jenis Kelamin Terhadap Tingkat Kelelahan Kerja Pada Pekerja Bagian Pembuatan Kulit Lumpia Di Kelurahan Kranggan Kecamatan Semarang Tengah. *Jurnal Kesehatan Masyarakat (Undip)*, 5(5), 413-423
- Mahardika, P. (2017). Faktor yang Berhubungan Dengan Kelelahan Kerja Pada Pekerja Pengisian Tabung Depot LPG PT. Pertamina (Persero) MOR VII Makassar Tahun 2017. Skripsi. Fakultas Kesehatan Masyarakat. Universitas Hasanuddin. Makassar
- Muammar, M. (2022). Faktor-Faktor Yang Berhubungan Dengan Kelelahan Kerja Pada Pekerja Layanan Teknik Di Pt. Pln (Persero) Ulp Batulicin Kabupaten Tanah Bumbu Tahun 2021 (Doctoral dissertation, Universitas Islam Kalimantan MAB)
- Pajow, D. A. (2016). Hubungan Antara Beban Kerja Dengan Kelelahan Kerja Pada Tenaga Kerja Di Pt. Timur Laut Jaya Manado. *PHARMACON*, 5(2).
- Raihanil, M. A. (2020). Faktor-Faktor Yang Berhubungan Dengan Kelelahan Kerja Pada Supir Truk Pt Defni Sejahtera Mandiri Padang Tahun 2020 (Doctoral dissertation, Universitas Andalas)
- Srilestari, W. (2016). Faktor-faktor yang berhubungan dengan kelelahan pada pekerja pembuat tahu di pabrik tahu kelurahan sumurrejo kecamatan gunungpati semarang. *Skripsi Kesehatan Masyarakat. Universitas Negeri Semarang.*
- Utami, N. N., Riyanto, R., & Evendi, A. (2018). Hubungan antara usia dan masa kerja dengan kelelahan kerja pada pekerja industri rumah tangga peleburan aluminium di desa eretan kulon kabupaten indramayu. *Afiasi: Jurnal Kesehatan Masyarakat*, 3(2), 69-71
- Wangi, V. K. N. (2020). Dampak kesehatan dan keselamatan kerja, beban kerja, dan lingkungan kerja fisik terhadap kinerja. *Jurnal Manajemen Bisnis*, 7(1), 40-50
- Windyananti, A. (2010). Hubungan antara kelelahan kerja dengan stress kerja pada tenaga kerja di pengolahan kayu lapis Wreksa Rahayu, Boyolali

The strategy of Health Office in Efforts to Overcome Stunting Prevalence in Toddlers in Sumedang Regency in 2022

Dini Afriani¹, Dessy Budianto²

Public Health Science Study Program
Faculty of Health Science, Sebelas April University
diniafriani@unsap.ac.id

Article Info

Article history:

Received April 12, 2022
Revised Mei 02, 2022
Accepted Mei 03, 2022

Keywords:

Strategy of the Health Office
Stunting Prevalence
Sumedang Regency

ABSTRACT

Stunting is a poor condition related to nutrition caused by a lack of nutritional intake for a long period of time due to the provision of food that is not in accordance with nutritional needs. Purpose of Research for analyze the Strategy of the Health Office in Efforts to Overcome Stunting Prevalence in Toddlers in Sumedang District in 2022. This research was conducted at the Sumedang District Health Office using a qualitative method with a descriptive approach. Using the Non Probability Sampling technique with the Purposive Sampling method with a sample of 3 informants. Based on interviews that the Strategy of the Health Service in an effort to overcome the prevalence of stunting in children under five in Sumedang Regency is quite good. This is evidenced by the prevalence of stunting in the Sumedang Regency which has decreased every year. Sumedang Regency has so far been quite optimal in implementing the 8 convergence of stunting handling, this is seen in terms of organizational strategy, program strategy, and resource support strategies carried out. The advice that can be given is that the Health Office is always committed to implementing its strategies related to stunting prevention in accordance with applicable local government regulations.



Copyright © 2022 PHSAJ. All rights reserved.

Corresponding Author:

Dini Afriani
Faculty of Health Science
Universitas Sebelas April
Jalan Cipadung No.54
Email: diniafriani@unsap.ac.id

1. INTRODUCTION

One indicator of the success of achieving health in the SDGs (Sustainable Development Goals) is the nutritional status of children under five. Infancy is a group that is vulnerable to malnutrition, one of which is stunting. According to WHO (World Health Organization), stunting is a condition of inappropriate body length that exceeds the Z-score deficit of minus 2 SD, where body length is below the median length or height of all samples which are international references.

Reporting to the Antara News website, in 2020, WHO estimates that the prevalence of stunted toddlers worldwide is 22% or 149.2 million. For Southeast Asia alone, it touched 27.4%. Based on the results of the Indonesian Toddler Nutrition Status Survey (SSGBI) in 2021, the stunting rate in Indonesia has decreased by 1.6% per year. The original 27.7% in 2019 became 24.4% in 2021. According to Riskesdas (2018), in Sumedang Regency in 2018 the prevalence of stunting was still relatively high at 32.2%. Meanwhile, based on a preliminary survey conducted at the Regional Research and Development Planning Agency (BAPPPEDA) of Sumedang Regency on June 7, 2022, judging by the results of the Toddler

Weighing Month (BPB) in February 2022, the prevalence of stunting in Sumedang Regency was 9.12%. with the 3 highest sub-districts namely Tanjungmedar (17.03%), Surian (17.39%), and Jatigede (19.08%).

Based on the results of an interview with the Head of the Public Health Division of the Sumedang District Health Office, the strategy carried out by the Health Office for stunting prevention so far is by optimizing specific and sensitive interventions. Specific interventions have focus on direct causes, namely nutritional problems and health problems for children under five. Meanwhile, sensitive interventions focus on indirect causes, namely food security, maternal parenting, access to health services, and environmental health. The success of the intervention program requires collaboration from various sectors. However, there are still several priority loci of stunting intervention in several sub-districts in Sumedang Regency. So that researchers are interested in conducting research on the Strategy of the Health Service in Efforts to Overcome Stunting Prevalence in Toddlers in Sumedang Regency in 2022.

1.1. Strategy

Strategy is a potential action that requires top-level management decisions and a large number of company resources. Strategy affects the prosperity of the company in the long term, especially for 5 years, and is oriented towards the future. The strategy has multifunctional and multidimensional consequences and needs to consider external and internal factors faced by the company or organization. (Fred R. David edition 10: 2008). Strategies are predetermined ways in which a company will proceed toward broad goals involving financial, operating, or social aspects of the company. (J.W. Hasslet in Ramlie R. Mertawidjadjaja: 1981). So it can be interpreted that strategy is all visible aspects that must be formulated so that certain goals can be achieved.

According to Reed Kennedy, strategy is a complex concept that includes many different processes and activities within an organization. (Reed Kennedy: 2020). The fundamental thing in formulating a strategy is that one must first explain and interpret the future not only focusing on the present, the direction of the strategy must be directed at a competitive advantage, then applied from top to bottom and has an external orientation as well as the flexibility is very essential and focuses on long-term results. (Goldworthy and Ashley: 1996)

1.2. Stunting

The World Health Organization (WHO) defines stunting as a failure of growth and development experienced by children due to prolonged lack of nutrition, recurrent infectious diseases, and inadequate psychosocial stimulation. Children who experience stunting, especially at an early age, may also experience growth retardation in other organs, including the brain. Because of its serious, variable, and long-term impact, stunting is considered a syndrome, where linear growth failure (stunted) is a sign of multiple pathological disorders associated with increased morbidity and mortality, decreased cognitive function, and increased risk of non-communicable diseases (Non-communicable Diseases). PTM) in adulthood.

According to the Big Indonesian Dictionary (KBBI), prevalence means the total number of cases of a disease occurring at a certain time in an area. According to Mega (2018), prevalence is the incidence of disease obtained from a survey, which shows the size of the burden of disease in a population. This information is one the thing that is useful for planners and public health administrators so that they can find out the allocation of health resources, and health services needed by a population. So it can be concluded that the prevalence of stunting is the incidence/proportion of children under five who are stunted in a certain population in a certain period of time.

1.3 Toddler

Toddlers are children who have reached the age of one year or more with the understanding of children under five years (Muaris, H. 2016). According to Sutomo and Anggraeni (2010), the grouping of toddlers consists of children aged 1-3 years (toddlers) and preschoolers (3-5 years). At the age of toddlers, children are still fully dependent on their parents to carry out important activities, such as bathing, defecating, and eating. The development of speech and walking has improved. However, other capabilities are still limited. (Amalia, 2011)

According to Wirandani, toddlers are defined as children under the age of five where the growth of the body and brain is very rapid in achieving optimal functions. Toddler period is often called the golden age because at this time basic growth will influence and determine the development of language skills, creativity, social awareness, emotional, and intelligence that run very quickly and are the basis for further development. According to Dewi et al, toddler age is an important period in the growth and development of children. Growth and development are caused by the maturity of the central nervous system, especially the brain. Toddlers will experience rapid growth and development at this time.

2. METHOD

The type of research used in this study is a qualitative method with a descriptive approach. The qualitative method is a method based on the philosophy of positivism, used to examine the condition of natural objects, (as opposed to an experiment) where the researcher is the key instrument, the data collection

technique is done by triangulation (combined), the data analysis is inductive/qualitative, and qualitative research results emphasize meaning rather than generalization. (Sugiyono, 2013) Descriptive qualitative research is a method of researching the status of human groups, an object, condition, system of thought or an event in the present. The purpose of descriptive qualitative research is to make a systematic, factual and accurate description, picture or painting of the facts, characteristics and relationships between the phenomena being investigated. (Ajat Rukajat, 2018). This study obtained data sources from interviews with 3 informants, namely the Head of the Public Health Division at the Health Office, the Nutrition and Sports Health Staff at the Health Office, and the Nutrition Staff at the Conggeang Community Health Center, Sumedang Regency.

Based on this opinion, the researcher argues that the type of descriptive qualitative research is research that provides an overview of a phenomenon that occurs in a real, realistic, and actual way about the strategy of the Health Service in an effort to overcome the prevalence of stunting in children under five in Sumedang Regency.

3. RESULTS AND DISCUSSION

3.1. Results

Strategy is an action that is influential and very determines the success of the objectives to be achieved. Therefore, strategy is a form of rational thinking that is arranged systematically and then formed based on observation and experience. (Kennedy: 1996)

It is very important for the government to implement a strategy to prevent stunting prevalence among children under five so that the people of Sumedang district are healthier and more prosperous. Not only health aspects must be considered, but socio-cultural aspects also need to be considered. Because the prevention of stunting needs to be seen from various aspects. This study examines the strategy of the Department of Health in an effort to overcome the prevalence of stunting in children under five in Sumedang district which is seen from 3 (three) types of strategies according to Kotten, namely:

1. Organizational Strategy (Corporate Strategy)

An organization will not be separated from a strategy to deal with various problems. A strategy is formulated through the vision and mission of a local government or in this case the Health Office is set forth in a program or activity. Based on the results of interviews with the Head of the Public Health Division of the Sumedang District Health Office, it can be seen that Sumedang Regency is included in the locus of acceleration of stunting handling from 100 regencies/cities. The health office is currently the Sumedang Regency Stunting Reduction Acceleration Team (TPPS), in accordance with Presidential Decree no. 72 of 2021. The Health Office also collaborates with BAPPPEDA (Regional Research and Development Planning Agency) which in this case BAPPPEDA becomes the coordinator of the TPPS. The existing specific intervention program cannot be carried out by the Health Office itself because it will not be optimal. Therefore, the Health Office requires cross-sectoral collaboration to make the specific intervention program a success. Effectively and efficiently Sumedang Regency already has the E-Simpat application in which there is stunting data so that all SKPD can review the development of stunting cases in Sumedang Regency.

2. Program Strategy (Program Strategy)

With inter-sectoral and cross-sectoral coordination, local governments will certainly not be separated from actions and actions to achieve certain goals. Quoted from the results of interviews conducted with one of the Kesga and Nutrition staff, it can be seen that in implementing the district integrated stunting reduction intervention related to 8 stunting convergence actions, the Health Office is only responsible for measuring and publishing stunting data. Then the quality data is from anthropometric tools according to standards for measuring toddlers. Intervention programs for stunting include education, exclusive breastfeeding, examination of pregnant women, giving PMT and giving blood-added tablets to pregnant women and young women. The health office provides facilities for these intervention activities and there are also assistance programs for pregnant women and children under five at risk implemented by the puskesmas and posyandu.

Based on the results of interviews with the Nutrition Staff of the Conggeang Health Center, it can be seen that the intervention programs originating from the BOK (Health Operational Assistance) include the provision of PMT for pregnant women with SEZ, home visits for pregnant women with SEZ/at risk of hypertension, home visits for at-risk toddlers, education and counseling for 1000 HPK. (First Day of Life). All these activities were carried out by village midwives and posyandu cadres. The obstacle to implementing stunting-related programs is the behavior and openness of the community itself. Also optimizing the distribution of Blood Add Tablets for young women. So in this case, the Department of Health approached and disseminated information to the community through community leaders by improving interpersonal communication strategies.

3. Resource Support Strategy (Resource Strategy)

After good inter-sectoral and cross-sectoral coordination, the Health Office then created programs as real actions in stunting prevention in Sumedang Regency. What cannot be separated from attention is related to the resources and infrastructure owned so that real actions can run optimally. Based on the results of interviews with the Head of the Public Health Division of the Sumedang District Health Office, it can be seen that the Health Office has Human Resources (HR) that coordinate well with each other, including posyandu cadres, Family Welfare Empowerment (PKK), academics, media and mass organizations in Sumedang Regency in accelerating the decline in stunting. To optimize existing human resources, the Health Office conducts monitoring and evaluation along with guidance to puskesmas and posyandu as well as other capacity building that refers to specific interventions.

The allocation of funds for handling stunting in Sumedang Regency is obtained from the Provincial Revenue and Expenditure Budget (APBD). ng sourced from the Tobacco Product Excise Revenue Sharing Fund (DBHCHT) and from Health Operational Costs (BOK). The funds are used to increase the capacity of officers, cadres capacity, and PKK capacity. This PKK has a major influence on program achievements related to the allocation of funds for PMT under-fives at risk, PMT for pregnant women with defisit energy cronic, education provision, and the procurement of 75 and 100 formula foods.

3.2. Discussion

1. Organizational Strategy of the Health Service in Efforts to Overcome Stunting Prevalence in Toddlers in Sumedang District in 2022

According to Robbins (1994) an organization is a consciously coordinated social unit, with a relatively identifiable boundary, which works on a relatively continuous basis to achieve a common goal. Organizational strategy is concerned with the formulation of the new vision and mission, goals, values, and strategic initiatives.

Based on the results of the interview, the organizational strategy of the Health Office in an effort to overcome the prevalence of stunting in Sumedang Regency is to continue to collaborate both between sectors and across sectors by closely holding regional regulations and the commitment to existing regional leaders. Then, the Health Office became part of the Team for the Acceleration of Stunting Reduction (TPPS). The Health Office also acts as a secretariat, focusing on the publication of stunting data every year. In this regard, this research is in line with the research of Nur Susanti et al (2022) which explains that the strategic strengths of an organization in dealing with stunting include the emergence of awareness from regional leaders, and commitment from the Regent, Regional Apparatus Organizations. (OPD) leading sector, cross-sectoral OPD to the Village Headline through stunting consultations.

Based on the description above, the researcher has the assumption that the handling of stunting cannot be carried out by one or two sectors alone. But it requires coordination and evaluation from all OPDs in a district government, in this case Sumedang Regency, so that stunting prevention efforts can be carried out optimally.

2. The Strategy of the Health Service Program in Efforts to Overcome Stunting Prevalence in Toddlers in Sumedang Regency in 2022

According to Santosa in Soesanto (2011), the program is a system of activity plans from an organization that is directed, integrated, and systematic which is made for a time span that has been determined by an organization.

Based on the results of interviews, the Health Office has a main program that cannot be separated from specific and sensitive interventions. However, there are still obstacles related to the open behavior of the target itself. Thus, to optimize existing intervention programs, the Health Office has a strategy related to interpersonal communication that must always be improved. So that there are no misunderstandings related to stunting and understand that stunting is different from malnutrition.

According to the results of research conducted by Aria., et al (2022), regarding stunting prevention, the government has formed policies to reduce stunting rates. Referring to the Guidelines for Implementing Integrated Stunting Reduction Interventions in Regencies/Cities issued by the Ministry of National Development Planning/Bappenas, efforts to reduce stunting are carried out through specific nutrition interventions and sensitive nutrition interventions. Specific nutritional interventions to address the direct causes of stunting associated with low nutritional intake and health status. Meanwhile, nutrition interventions are sensitive to address indirect causes related to food security, especially access to nutritious food, the social environment related to infant feeding and childcare practices, access to health services, and environmental health.

Based on the description above, the researcher assumes that the stunting management program of the Health Office has focus on specific and sensitive interventions. In addition, the

Health Office has a main program, namely providing assistance to pregnant women with SEZ or pregnant women at risk of hypertension and mentoring children under five at risk accompanied by the distribution of PMBA. In addition, currently the Health Office is trying to optimize the distribution of blood-supplementing tablets (TTD) to young women. So, of all these programs, in this case the technical implementers are the puskesmas and posyandu.

3. Strategy for Supporting Health Service Resources in Efforts to Overcome Stunting Prevalence in Toddlers in Sumedang Regency in 2022

According to E. Hetzer (2012), after setting the targets and objectives of the program of activities, the focus of attention is the strategy of supporting resources, namely utilizing all available resources in a government, including various government agencies. Including human resources and infrastructure.

Based on the results of the interview, the resource strategy of the Health Office in an effort to overcome the prevalence of stunting is to strengthen existing networks in puskesmas, posyandu, and between other sectors. Besides this, Sumedang Regency already has an E-Simpatu application that makes it easier for all sectors to monitor and intervene. This has similarities with the results of research conducted by Vita., et al (2019), that strengthening the role of the village through posyandu cadres and village midwives in coordination with OPD Leading sectors and across sectors in improving the skills of stunting cadres is very necessary. Given that posyandu is the technical implementer of the implementation of the intervention program. Meanwhile, adequate funds come from APBD, BOK and provincial APBD.

Based on the description above, researchers have the assumption that human resources and infrastructure are the most important part to carry out stunting reduction activities so that they can be optimal by only maximizing existing programs. The addition of human resource capacity accompanied by periodic monitoring and evaluation activities can create more qualified and professional human resources. So that the allocation of funding sources for stunting treatment can be right on target.

1. CONCLUSION

Based on the description of the research results, the strategy of the Department of Health in an effort to overcome the prevalence of stunting in children under five in Sumedang Regency in 2022 in order to maximize existing intervention programs can be concluded as follows:

1. The Health Office is active in the Sumedang Regency Stunting Reduction Acceleration Team (TPPS) and collaborates both between sectors and across sectors.
2. There is an interpersonal communication strategy through a persuasive approach to the community. So that the community, especially the target of stunting, can be active in efforts to overcome the prevalence of stunting in Sumedang Regency.
3. Besides improving the skills and capacity of existing human resources and infrastructure, Sumedang Regency already has the E-Simpatu application. So that the SKPD can directly monitor the prevalence of stunting and it is easy to intervene.

REFERENCES

- Antara News. 2021. *Prevalensi dan Jumlah Balita Stunting Di Dunia 2021* (<https://antaranews.com/joint-child-malnutrition-estimates-2016-2021>., diakses pada 25 April 2022 pukul 13.45 WIB)
- Ayu, D. S. (2020). Strategi Dinas Kabupaten Klaten Dalam Penanggulangan Gizi Buruk. *Universitas Sebelas Maret*.
- Bahri, S. (2021). Strategi Dinas Kesehatan Dalam Menekan Laju Penderita Stunting Di Kabupaten Enrekang. *Universitas Muhammadiyah Makassar*.
- C, R. (2014). *Malnutrition in Asia*. UNICEF East Asia Pasific.
- Data Publikasi Stunting Sumedang Dinas Kesehatan Tahun 2021.
- Data Stunting Februari 2022 BAPPPPPEDA Kabupaten Sumedang.
- Data Stunting Jawa Barat. 2021. *Presentase Balita Stunting Kabupaten/Kota di Provinsi Jawa Barat Tahun 2019* (<https://opendata.jabarprov.go.id/presentase-balita-stunting-kabupaten-kota-di-provinsi-jawa-barat-tahun-2019>., diakses pada 27 April 2022 pukul 14.00 WIB)
- David, F. R. (2008). *Strategic Manajement*. Jakarta: Salemba.

- Endang, A. L. (2020). *Pencegahan Stunting Pentingnya Peran 1000 Hari Pertama Kehidupan*. Depok: Rajagrafindo Persada.
- Fathul, Arif. 2021. *Angka Stunting di Sumedang Meningkat 40,6% Selama Tahun 2021* (<https://inisumedang.com/angka-stunting-di-sumedang-meningkat-40,6%-selama-tahun-2021>., diakses pada 28 April 2022 pukul 13.20 WIB)
- Heri, R. (2017). *Teknik Pengambilan Sampel*. FMIPA Pendidikan Matematika
- Kemkes RI. 2018. *Situasi Balita Stunting di Indonesia* (<https://kemkes.go.id/situasi-balita-stunting-di-indonesia>., diakses pada 26 April 2022 pukul 10.45 WIB)
- Kemkes RI. 2021. *Penurunan Prevalensi Stunting Tahun 2021 Sebagai Modal Menuju Generasi Emas Indonesia 2045* (<https://sehatnegeriku.kemkes.go.id/penurunan-prevalensi-stunting-tahun-2021-sebagai-modal-menuju-generasi-emas-indonesia-2045>., diakses pada 26 April 2022 pukul 11.30 WIB)
- Kennedy, R. (2020). *Strategic Manajement*. United States: Virginia Publishing.
- Masturoh, I. (2018). *Metodologi Penelitian Kesehatan*. Jakarta: Kemenkes RI.
- Nurlatif Vita.,dkk (2019). *Stunting : Besaran Masalah dan Strategi Pencegahannya di Kabupaten Pekalongan*. Universitas Pekalongan.
- Peraturan Bupati Sumedang No. 82 Tahun 2019. *Percepatan Penurunan dan Pencegahan Stunting Terintegrasi* (<https://jdih.sumedang.kab.go.id>., diakses pada 29 April 2022 pukul 10.00 WIB)
- Purba, S. H. (2020). *Analisis Implementasi Kebijakan Penurunan Stunting di Desa Secangang Kabupsten Langkat*. UIN Sumatera Utara.
- Profil Kabupaten Sumedang 2022. (<https://kabsumedang.go.id/profil-kabupaten-sumedang-tahun-2022>) diakses pada 04 Juli 2022 pukul 16.00 WIB)
- Raja Aria.,dkk (2021). *Implementasi Kebijakan Penanggulangan Stunting Oleh Dinas Kesehatan di Kabupaten Sukabumi*. Universitas Muhammadiyah.
- Riskesdas. 2018. *Hasil Riset Kesehatan Stunting* (<https://kesmas.kemkes.go.id/hasil-riskesdas-2018>., diakses pada 27 April 2022 pukul 16.35 WIB)
- RM, R. (1981). *Strategi Pengendalian Administrasi Perusahaan*. Bandung: Angkasa.
- Sandi, Acep. 2020. *Tanjungmedar dan Cibugel Jadi Penyumbang Angka Stunting Terbanyak di Sumedang Tahun 2020* (<https://korsum.id/tanjungmedar-dan-cibugel-jadi-penyumbang-angka-stunting-terbanyak-di-sumedang-tahun-2020>., diakses pada 28 April 2022 pukul 09.37 WIB)
- Sugiyono, P. (2013). *Metodologi Penelitian Kuantitatif dan Kualitatif*. Bandung: Alfabeta.
- Susanti Nur.,dkk. (2022). *Strategi Akselerasi Penurunan Stunting Wilayah Pesisir Kabupaten Pekalongan*. Universitas Pekalongan.
- Taufiqurokhman. (2016). *Manajemen Strategik*. Jakarta: FISIP Universitas Prof. Dr. Moestopo.
- Wulan, M. (2018). *Mengukur Status Kesehatan Penyakit*.
- Yunus, E. (2016). *Manajemen Strategis*. Yogyakarta: Andi Offset.

THE RELATIONSHIP BETWEEN MOTHER KNOWLEDGE AND ATTITUDES TOWARDS BASIC IMMUNIZATION COMPLETENESS IN INFANTS IN CIMALAKA DISTRICT IN 2022

Dini Justian¹, Amelia Siti Nurjanah²

Public Health Study Program
Faculty of Health Sciences, Sebelas April University
Email: dinijustian@unsap.ac.id

Article Info

Article history:

Received Jun 12, 2022
Revised Aug 20, 2022
Accepted Aug 26, 2022

Keywords:

Completeness of basic immunization
Knowledge
Attitude

ABSTRACT

The immunization program is part of basic health services. This program is also part of an effort to accelerate the breaking of the chain of transmission of PD3I (Diseases that can be prevented by immunization). To find out the relationship of knowledge and attitudes of mothers towards the completeness of basic immunizations in babies. The method used is quantitative research with a cross-sectional design. The study sample was mothers who had babies of 9-12 months in Cimalaka District, which totaled 81 people. The sampling technique is proportional random sampling. This study shows that, maternal knowledge is in the good category, namely (42.0%), and maternal attitudes are also in the good category (55.6%). Using the Chi square statistical test where the degree of confidence used is 95% and $\alpha = 0.05$, a p value for knowledge of 0.022 and an attitude with (p value = 0.007) is obtained. So that the null hypothesis was rejected or in other words statistically it turned out to be a proven relationship between maternal knowledge and attitudes with the completeness of basic immunizations. From this study there is a relationship between knowledge and the attitude of mothers towards the completeness of basic immunizations in babies. The advice in this study is that health workers are expected to continue to carry out counseling activities regarding basic immunization to mothers who have babies.



Copyright © 2022 PHSAJ. All rights reserved.

Corresponding Author:

Dini Justian
Public Health Science Study Program,
Faculty of Health Science, Sebelas April University,
Jl. Cipadung No.54, Kotakaler, Sumedang Utara, Sumedang, Jawa Barat 45621, Indonesia
Email: dinijustian@unsap.ac.id

1. INTRODUCTION

The immunization program is part of basic health care. This program is also part of an effort to accelerate the breaking of the chain of transmission of PD3I (Diseases that can be prevented by immunization) with the aim of improving the degree of public health. Immunization is one of the efforts to actively cause / increase a person's immunity to a certain disease, so that if one day exposed to the disease will not get sick or only experience mild pain.

Babies who are not immunized approximately 3 out of 100 child births will die from measles, 2 out of 100 child births will die from whooping cough, 1 in 100 child births will die from tetanus disease and out of every 200 children 1 will suffer from polio so the government requires every child to get basic immunization against 7 kinds of diseases, namely tuberculosis, diphtheria, tetanus, whooping cough, measles, meningitis and hepatitis B included in the Immunization Development Program (PPI) include hepatitis B, BCG, DPT-HB-HiB (pentavalent), polio, and measles. Other immunizations that are not mandatory by the

government but recommended include against rubella disease, typhus, HiB, hepatitis A, chickenpox (Proverawati & Andini, 2018). Based on *World Health Organization* data in 2019, it was stated that as many as 14 million babies did not receive an initial dose of the vaccine, and another 5,7 million babies did not get a complete basic immunization. The latest data on vaccine coverage estimates from WHO and UNICEF in 2019 shows that vaccine administration has only reached 86%. The coverage of Complete Basic Immunization (IDL) in Indonesia has decreased significantly since the beginning of 2020, from 84,2% to 58,4% in 2021 from the target of 79,1%. The complete basic immunization coverage in West Java based on the results of 2021 Basic Health Research data reached 82,5%. Based on basic immunization coverage data in Sumedang Regency in 2021, it reached 88,6% of the 95% target. Meanwhile, in Cimalaka District, the immunization coverage has not reached the target, in 2021 it has only reached 76,2% of the 95% target.

According to a preliminary survey conducted on May 10, 2022, secondary data was obtained, that in 2020 the complete basic immunization coverage reached 83%, while the complete basic immunization coverage in 2021 decreased to 76.2% from the target of 95%. Based on the results of interviews conducted on 8 mothers who have babies in the Cimalaka District area, 5 out of 8 mothers have insufficient knowledge about the benefits of immunization and the types of immunizations given to babies, and 4 out of 8 mothers do not bring babies to be immunized and are often late in immunizing their babies because they are busy working in the morning so they cannot visit the posyandu to immunize. In addition, family support is very important for mothers to influence a mother's attitude so that mothers are motivated to bring their babies to be immunized.

2. METHOD

This type of research includes quantitative research, namely research by obtaining data in the form of numbers or qualitative data that is numbered. The research design uses a cross sectional design which aims to determine the relationship between variables where the independent variable is mother's knowledge and attitudes with the dependent variable, namely the completeness of basic immunization, identified at one time using a questionnaire and MCH book (Sugiyono, 2019).

3. RESULTS AND DISCUSSION

3.1. Results

a. Univariate analysis

1. Mother's knowledge

No	Knowledge	Frequency	Percentage (%)
1	Good	34	42,0
2	Enough	31	38,2
3	Less	16	19,8
Total		81	100

Source : Primary Data 2022

It can be seen that most of the respondents are in the good knowledge category, as many as 34 (42,0%) respondents.

2. Mother's attitude

No	Attitude	Frequency	Percentage (%)
1	Good	45	55,6
2	Enough	33	40,7
3	Less	3	3,7
Total		81	100

Source : Primary Data 2022

It can be seen that most of the respondents are in the good attitude category, as many as 45 (55,6%) respondents.

3. Completeness of basic immunization in infants

No	Immunization Equipment	Frequency	Percentage (%)
1	Complete	57	70,4
2	Incomplete	24	29,6
Total		81	100

Source : Primary Data 2022

It can be seen that most of the infants have complete immunization status, namely 57 infants (70,4%).

b. Bivariate analysis

1. Relationship between mother's knowledge and completeness of basic immunization ini infants

No	Knowledge	Immunization Equipment				Total	P value
		Incomplete		Complete			
		F	%	F	%	F	%
1	Less	8	50,0	8	50,0	16	100
2	Enough	11	35,5	20	64,5	31	100
3	Good	5	14,7	29	85,3	34	100
Total		24	29,6	57	70,4	81	100

Source : Primary Data 2022

Based on the cross tabulation table between the mother's level of knowledge and the completeness of basic immunization for infants in Cimalaka District in 2022, it can be concluded that of 34 mothers who have good knowledge, 29 mothers (85.3%) complete immunizations for their babies, while 5 mothers (14.7%) did not complete immunizations for their babies.

By using the Chi square statistical test where the degree of confidence used is 95% and = 0.05, the p value is 0.022 where the p value is < 0.05. So that the null hypothesis is rejected or in other words statistically it means that there is a significant relationship between the mother's level of knowledge and the completeness of immunization for the baby.

2. The relationship between mother's attitude and completeness of basic immunization in infants

No	Attitude	Immunization Equipment				Total	P value
		Incomplete		Complete			
		F	%	F	%	F	%
1	Less	3	100	0	0	3	100
2	Enough	12	36,4	21	63,6	33	100
3	Good	9	20,0	36	80,0	45	100
Total		24	29,6	57	70,4	81	100

Source : Primary Data 2022

Based on the cross tabulation table between the mother's attitude and the completeness of basic immunization for infants in Cimalaka District in 2022, it can be concluded that of 45 mothers who have good knowledge, 36 people (80.0%) complete immunizations for their babies, while 9 people (20.0 %) did not complete immunizations for their babies.

By using the Chi square statistical test where the degree of confidence used is 95% and = 0.05, the p value is 0.009 where the p value is < 0.05. So that the null hypothesis is rejected or in

other words statistically it means that there is a significant relationship between the mother's attitude and the completeness of immunization for the baby.

3.2. Discussion

a. Univariate analysis

1. Mother's knowledge about basic immunization

The results of this study indicate that most respondents in the Cimalaka sub-district have good knowledge of basic immunization, namely 34 mothers (42.0%). Knowledge of immunization includes knowing the meaning of immunization, diseases that can be prevented through immunization, benefits of immunization, type of immunization, time and amount of immunization.

Knowledge at the basic level starts from knowing, which a person can know if the person has gone through the stages of the sensing process, starting from sight, hearing, smell, taste and touch. However, the knowledge gained by humans is mostly obtained from visual and auditory sensing (Notoatmodjo, 2012). The results of this study are also in line with the theory in Notoatmodjo (2012), which states that when an individual has the ability to think in a directed and effective manner, so that people who have high knowledge will easily absorb information, suggestions, and advice. Therefore, someone who is highly knowledgeable will tend to have good behavior in the health sector, namely in this case to immunize their children.

The results of this study are also in line with research conducted by Rahmi Kurnia Gustin (2012), of 109 respondents more than most (53.2%) have good knowledge about basic immunization and already know that basic immunization makes babies who are not immune get active immunity to prevent a disease. The results of this study are also supported by research by Razana Hijani (2014), of the 100 respondents studied, the highest level of knowledge is good with a total of 76 respondents (76%) because mothers who have good knowledge can certainly change the attitudes and actions of mothers to want immunize their children. However, this is contrary to the research conducted by Selvina Elia Roza (2017), which states that some respondents have knowledge in the low category (54.55) while there are some respondents who have an attitude in the less category (51.9%).

Based on the assumption of the researcher in this study that the mother's knowledge about basic immunization in Cimalaka District is good. Mothers are able to answer and know what immunization is, the benefits of immunization, diseases that can be prevented by immunization and immunization schedules. Good knowledge can affect the completeness of basic immunization in infants. Generally someone who has good knowledge will tend to have a good mindset and upbringing so that a mother will complete basic immunizations for her child. This is also influenced by the level of education of mothers in Cimalaka District, most of whom graduated from high school so that it will affect the level of knowledge of a mother in terms of understanding and receiving information given about complete basic immunization. And most of the mothers also do not work, so mothers will be diligent in bringing their children for immunization at the posyandu.

2. Mother's attitude about basic immunization

The results of this study indicate that 45 mothers (55.6%) in the District of Cimalaka have a good attitude towards basic immunization. This good attitude is due to good knowledge about basic immunization so that respondents are aware of the importance of providing basic immunization for infants.

Attitude is a readiness to react to an object in a certain way, attitude is an evaluation response to the experience of cognition, reaction, affection, will and past behavior and humans are not born with certain views or feelings, but attitudes are formed throughout their development (Azwar, 2013). The results of this study are in line with Azwar's theory (2013), which states that the level of attitude includes acceptance, namely the individual pays attention to the stimulus (stimulus) given, responding where someone gives a response through verbal, action, appreciating that is someone gives the opportunity to others to do or discuss something. , and is responsible, that is, the individual states that he is ready to risk the decisions or actions he takes in completing his baby's immunizations.

The results of this study are in line with research conducted by Rahmi Kurnia Gustin (2012), which showed the results of the study with a number of 109 respondents more than some (51.4%) had a good attitude about basic immunization this was due to good knowledge of mothers about immunization. The results of this study are also in line with the results of research that has been carried out by Sagala (2016), which explains that 86 respondents have a good attitude, this is influenced by personal experience and other people who are trusted and considered good for respondents to follow,

Based on the assumption of the researcher in this study that the mother's attitude towards the completeness of basic immunization in Cimalaka District is very good. The attitude of a good mother can also be influenced by good knowledge because most mothers in Cimalaka District have good knowledge. The attitude of a good mother is also influenced by the mother's experience and awareness of the importance of basic immunization so that she will act and respond to something she thinks is good to do. Although some mothers do not want to fully immunize their babies, they believe that immunization only makes the baby sick and thinks it has no effect on improving the baby's health. Meanwhile, mothers with good attitudes considered that the benefits of immunization outweighed the side effects and tended to immunize their babies completely. Some mothers who have a positive attitude may be due to factors other than level of education and knowledge, for example, mothers who bring their children to the posyandu because they see neighbors coming to the posyandu so that they come together, or because they are invited by neighbors and also because they hear an announcement that a posyandu will be held. Besides that, mothers who have a poor attitude towards basic immunization services are also caused by cultural factors and also incorrect information obtained about immunization.

3. Completeness of basic immunization in infants

The results showed that almost all mothers in the Cimalaka sub-district had babies who had received complete basic immunizations, namely 57 infants (70.4%) completeness of basic immunization was measured according to the schedule listed on the Card Towards Health (KMS) to determine immunization status. in babies.

Basic immunization is the provision of complete basic immunization for infants 0-11 months and as a way to prevent several diseases including Diphtheria, Tetanus, Pertussis, Measles, Polio, and Tuberculosis. The Indonesian government strongly encourages the implementation of the immunization program as a way to reduce morbidity and mortality rates for infants/toddlers, preschoolers. The results of this study are in line with the theory of Proverawati & Andini (2018), which states that almost most infants have complete immunization status. This is influenced by the behavior of a good mother so that it affects the behavior of mothers in healthy living including the completeness of immunizations for babies.

The results of this study are in accordance with research conducted by Wadud (2013), which states that the results of the study with a sample of 53 infants obtained complete basic immunization of infants as much as 69.8% and incomplete infant immunization status as much as 30.2%, this happens because the mother's level of knowledge is good and most babies get immunizations at the posyandu, the posyandu is not too far away. And it is supported by research by Razana Hijani (2014), which shows the results of research on the completeness of basic immunization are complete with a total of 66 respondents (66%), this is influenced by knowledge, level of education, dependence on distance of service, work status, discipline of health workers. and staff motivation.

Based on the researcher's assumption in this study, 81 infants aged 9-12 months in Cimalaka District had complete immunization status. This is supported by good knowledge and attitudes of mothers regarding basic immunization, basic immunization services are easily available, as well as government regulations that require every baby to receive basic immunization so that a mother will immunize her child completely, even though some babies have incomplete immunization status. Infants whose immunization status is incomplete will be at risk for diseases that can be prevented by immunization compared to infants whose complete immunization status is. Some of the incomplete immunizations for babies are caused by the mother's ignorance to give immunizations, and there are also some children who are sick so that they get immunizations late and are not immunized and

many are immunized not according to their age. This is also likely due to mothers who are busy working and lack of information from health workers.

b. Bivariate analysis

1. Relationship between mother's knowledge and completeness of basic immunization in infants

The results showed that from 34 respondents who had good knowledge, 29 mothers (85.3%) completed immunization for their babies and 5 mothers (14.7%) did not complete immunizations for their babies. The results of the Chi Square statistical test obtained a p value of 0.022 <0.05 which means that statistically it is proven that there is a significant relationship between mother's knowledge and completeness of basic immunization in infants in Cimalaka District.

Knowledge is curiosity through sensory processes, especially in the eyes and ears of certain objects. Knowledge is an important domain in the formation of one's behavior (Fitri, 2011). The results of this study are in line with Fitriani's theory (2011), which states that behavior based on knowledge will be more lasting than behavior that is not based on knowledge. Good knowledge will have a good influence on the mother's actions in completing the basic immunization of her baby.

This study is in line with research conducted by Andrinus Josiman (2014), which states that there is a relationship between the mother's level of knowledge and the completeness of basic immunization in infants, this is because the mother's knowledge about immunization is extensive and already understands about basic immunization. The results of this study are also in accordance with research conducted by Sumiatun (2014), which states that maternal knowledge is related to the completeness of immunization, so it can be said that good knowledge of the baby's mother will affect the mother's behavior in giving and completing basic immunizations for infants, because a mother wants bring her baby to be immunized because she knows that immunization is very important and has benefits for the body's immunity against a disease. However, Heraris' (2015) study did not find a significant relationship between the level of knowledge and completeness of immunization. This is because minimal knowledge makes people unable to interpret correctly about immunization or the object. Completeness of immunization is not only influenced by knowledge. Other factors that can affect the completeness of basic immunization include family support, health care services, distance from residence to health service centers, availability of health facilities and infrastructure, as well as other related social factors.

Based on the assumption of the researcher in this study that there is a relationship between mother's knowledge and the completeness of basic immunization in infants, which means that the better the mother's level of knowledge about basic immunization, there is a tendency for mothers to provide complete immunizations to their babies. This shows that mother's knowledge affects the immunization status of her baby, where babies whose mothers have good immunization knowledge will have complete basic immunization status compared to babies whose mothers have poor knowledge of immunization. Lack of mother's knowledge can result in incomplete basic infant immunization. In addition to education, busy working mothers can be more vulnerable to thinking about their work and not having time to take the time to take their babies immunized. Mothers who work outside the home often do not have the opportunity to come to the posyandu because perhaps during posyandu activities the mother is still working at her workplace.

2. The relationship between mother's attitude and completeness of basic immunization in infants

The results of this study showed that from 45 respondents who had a good attitude, 36 mothers (80.0%) completed immunization for their babies, while 9 mothers (20.0%) did not complete immunizations for their babies. The results of the Chi square statistical test obtained p value of 0.009 <0.05 which means that there is a relationship between mother's attitude and completeness of basic immunization for infants in Cimalaka District.

Based on Bloom's concept, attitude is the second most important factor after the environment that will affect a person's health status. Alport in Notoatmodjo (2010), explains that the attitude has three main components, one of which is the tendency to act, these three components together form a complete attitude (total attitude). In determining this attitude, knowledge, thinking, beliefs, and emotions play an important role. For example, in this study, respondents who know about

immunization will bring respondents to think and try so that their children's basic immunizations are complete. The results of this study are in line with the theory, namely the attitude of respondents about immunization is related to the completeness of basic immunization.

The results of this study are in line with research conducted by Putri Dwi Kartini (2010), which states that there is a relationship between mother's attitude and the completeness of basic immunization in infants. This is because the mother's attitude is good in completing basic immunization. The results of this study are also in line with research conducted by Sintya Lestari (2021), which states that there is a relationship between attitudes and completeness of basic immunization in infants with a p value of 0.001. Based on the results of this study, it can be seen that attitudes are related to the completeness of basic immunization in infants. Mothers with good attitudes will tend to support immunization. With a supportive attitude, a person will be better at giving the perception of something he knows.

Based on the researcher's assumption in this study that attitude is related to the completeness of basic immunization in infants in Cimalaka District, which means that the better the mother's attitude, the more likely the mother to give complete basic immunization to her baby. Attitude is a readiness or willingness to act, and describes the likes or dislikes of an object. Attitudes will be followed by someone on the basis of liking or disliking something. If a mother supports this, then she will behave to carry out something she supports. Based on this, the completeness of basic immunization carried out by mothers is related to receiving the benefits they get from complete basic immunization for their babies so that they are happy to carry out basic immunizations for their babies.

4. CONCLUSION

From the results of research conducted in Cimalaka District regarding the Relationship between Knowledge and Maternal Attitudes towards the Completeness of Basic Immunization in Cimalaka District in 2022, conclusions can be drawn:

1. Maternal knowledge about basic immunization of babies in Cimalaka District is in the good category of 34 people (42.0%).
2. The attitude of mothers towards the completeness of basic immunization is in the good category of 45 people (55.6%).
3. There is a significant relationship between maternal knowledge and attitudes and completeness of immunization in infants in Cimalaka District, with a value of knowledge ($p = 0.022$) and attitudes ($p = 0.009$).

REFERENCES

- Sugiyono, (2019). *Metode penelitian pendidikan : (pendekatan kualitatif, kuantitatif dan R&D)*. Bandung : Alfabeta
- Proverawati, A., & Andini, C. S. (2018). *Imunisasi dan Vaksinasi*. Yogyakarta : Nuhha Offset.
- Arikunto, S. (2013). *Prosedur penelitian suatu pendekatan publik*. Jakarta : Rineka Cipta.
- Fitriani, S. (2011). *Promosi Kesehatan*. Yogyakarta : Graha Ilmu.
- Umaroh, S. (2014). Hubungan antara pengetahuan dan sikap ibu dengan kelengkapan imunisasi dasar di wilayah kerja puskesmas kartasura kabupaten sukoharjo. *Fakultas Ilmu Kesehatan Universitas Muhammadiyah Surakarta*.
- WHO. (2018). Immunization coverage. Retrieved from <http://www.who.int/news-room/factsheets/detail/immunization-coverage>
- Hijani, R. (2017). Hubungan Pengetahuan Ibu Tentang Imunisasi Terhadap Kelengkapan Imunisasi Dasar pada Balita Di Wilayah Kerja Puskesmas Dumai Kota Kelurahan Dumai Kota. *Jom.Unri.Ac.Id*, 1. Retrieved from.
- Kementerian Kesehatan Republik Indonesia. (2020). *Profil Kesehatan Indonesia*. Jakarta:Kementerian Kesehatan Republik Indonesia.
- Wahyuni, Putri. (2014). *Faktor-faktor yang berhubungan dengan pencapaian target cakupan imunisasi dasar di Wilayah Kerja Puskesmas Helvetia Medan Tahun 2014* (Skripsi). Medan : Fikes USU.

- Igiany, P. D. (2019). Hubungan dukungan keluarga dengan kelengkapan imunisasi dasar. *Jurnal Ilmu Kesehatan Masyarakat Berkala* 67-75.
- Kharin, N. A. (2021). Pengetahuan, Pendidikan, dan Sikap Ibu Terhadap Imunisasi Dasar Lengkap di Kabupaten Bogor. *Jurnal Pengabdian Kesehatan Masyarakat* 25-31.
- Gustin, R. K. (2012). Hubungan Pengetahuan dan Sikap Tentang Imunisasi Terhadap Pemberian Imuisasi Dasar Lengkap pada Balita di Wilayah Kerja Puskesmas Malalak Kabupaten Agam. *Jurnal Kesehatan STIKes Prim Nusantara Bukittinggi*, 3 (2).
- Hindun, S. E. Vasra (2013). Hubungan Antara Pengetahuan dan Sikap Ibu dengan Status Kelengkapan Imunisasi Dasar pada Balita di Wilayah Kerja Puskesmas Swakelola Gandus Palembang tahun 2009. *Jurnal Kesehatan (The Journal of Health)*. 1, 46-53.
- Dewi, A. P., dkk (2014). Hubungan Tingkat Pengetahuan Ibu dengan Pemberian Imunisasi Dasar Lengkap pada Bayi di Kelurahan Parupuk Tabing Wilayah Kerja Puskesmas Lubuk Buaya Kota Padang Tahun 2013. *Jurnal Kesehatan Andalas* 3 (2).
- Sumiatun, (2014). Hubungan Pendidikan dengan Pengetahuan Ibu Dalam Pemberian Imunisasi Dasar Lengkap di Puskesmas Jepang Tahun 2014. *Jurnal Kesehatan Masyarakat* 5-11.
- Pademme, D, (2021). Hubungan Pengetahuan Dan Sikap Ibu Dengan Kelengkapan Imunisasi Dasar Pada Bayi di Posyandu Asoka Wilayah Kerja Puskesmas Waisai Kabupaten Raja Ampat. *Jurnal Insan Cendekia* 78-86.
- Arda, Z, dkk. (2018). Hubungan Pekerjaan, Sikap Ibu Dan Akses Dengan Kelengkapan Imunisasi Dasar Di Kabupaten Gorontalo.
- Susanti, E, 2019. Hubungan Pengetahuan dan Sikap Ibu Dengan Kelengkapan Imunisasi Dasar Di Wilayah Kerja Puskesmas Termidung Tahun 2019.
- Maryumi, A, (2013). *Ilmu Kesehatan Anak dalam Kebidanan*, Jakarta: TIM
- Pedoman Penyusunan Skripsi, (2022), Fakultas Ilmu Kesehatan Universitas sebelas April.

RELATIONSHIP BETWEEN ANTENATAL CARE VISITS AND LBW WITH STUNTING INCIDENCE IN TODDLERS AGED 24-59 MONTHS IN THE WORKING AREA OF THE SITURAJA HEALTH CENTER SUMEDANG 2022

Ely Walimah ¹, Dila Novita Rahma ²
Public Health Science Study Program
Faculty of Health Science, Sebelas April University
ely@unsap.ac.id

Article Info

Article history:

Received April 29, 2022

Revised Mei 02, 2022

Accepted Mei 9, 2022

Keywords:

Toddlers

LBW (Low Birth Weight)

Antenatal Care Visits

Stunting

ABSTRACT

Stunting was a condition of growth failure that occurs in toddlers due to long-term malnutrition that the children were shortest for their age. This study aims to determine the relationship between Antenatal care visits and Low Birth Weight to the incidence of stunting in toddlers aged 24-59 months in the working area of the Situraja Health Center in 2022. The research design was Case Control, with a study sample of 186 toddlers who were divided into the case group (93) and the control group (93). The sampling technique used is Proportional Random Sampling. The Maternal and Infant Cohort was chosen as the research instrument, with data analysis using Chi-Square. The results of data analysis showed that there was a significant relationship between ANC visits ($p = 0.000$; $OR = 4,979$) and LBW ($p = 0.000$; $OR = 5,133$) with the incidence of stunting in toddlers aged 24-59 months in the working area of the Situraja Health Center in 2022. For the Situraja Health Center to increase mentoring activities for women of reproductive age to perform early detection of stunting factors, intensive counseling about the importance of prenatal care, and providing additional food for pregnant women with CED.



Copyright © 2022 PHSAJ. All rights reserved.

Corresponding Author:

Ely Walimah
Public Health Science Study Program,
Faculty of Health Science, Sebelas April University,
Jl. Cipadung No.54, Kotakaler, Sumedang Utara, Sumedang, Jawa Barat 45621, Indonesia.
Email: Ely@unsap.ac.id

1. INTRODUCTION

Toddler is a term that comes from the abbreviation under five years. Toddler health is greatly influenced by the nutrients absorbed of their body. Toddlers who lack nutritional intake will be at risk of experiencing malnutrition, one of which is stunting. Stunting was a condition of growth failure that occurs in toddlers due to long-term malnutrition.¹ Toddlers were defined as stunted if their height for age was more than two standard deviations below the median WHO Child Growth Standards.² This situation was begins in the prenatal period resulting in low birth weight and continues to affect growth, especially in the first 2 years of life (Roediger, 2020).³ They have a risk of experiencing delays in brain development which can lead to decreased intellectual abilities, productivity, and the risk of degenerative diseases in the future.⁴

Indonesia's stunting data ranks second in Southeast Asia after Cambodia.⁵ Based on the results of the Indonesian Nutrition Status Study (SSGI) in 2021, the national stunting rate is 24.4%. There are several provinces in Indonesia which are the largest contributors to stunting, one of which is West Java with a prevalence of 24.5%.⁶ Data published by the Sumedang District Health Office showed the percentage of

toddlers were stunted at 12.05%.⁷ One of the contributors to stunting cases in Sumedang District is Situraja Sub-district as many as 135 toddlers aged 24-59 months with 23 very short categories and 112 short categories (Toddlers Weighing Month Results, 2022).⁸

Stunting is caused by many factors which are divided into direct and indirect factors among them are antenatal care (ANC) visits and low birth weight.³ Antenatal care is a health service provided to pregnant women by professional health workers during pregnancy in accordance with antenatal care standards by conducting examinations and monitoring of pregnancy, as well as providing information to optimize the mental and physical health of pregnant women so that they face childbirth, postpartum, preparation for giving birth, breastfeeding, and the return of normal reproductive health. Antenatal visits are contacts between pregnant women and health workers who provide antenatal care to get a pregnancy checks. It aims to monitor and safeguard the wellbeing of the mother and foetus, detect any pregnancy complications and take necessary measures, respond to mother's complaints, prepare mother for birth, and promote healthy behaviors of mother.⁹ Based on the "Guidelines for Antenatal Care, Childbirth, Postpartum, and Newborns in the New Habit Adaptation Era, Revision 2", the standard for antenatal care visits is a minimum of 6 examinations during pregnancy, and a minimum of 2 examinations by doctors in the first and third trimesters.¹⁰ If the mother does not carry out antenatal care visits according to standards, the health of the mother and fetus is not properly monitored, so there is a risk of having stunting children. According to Lawrence Green in Notoadmojo (2016) Antenatal care visits by pregnant women are influenced by several factors including age, education level, parity, and knowledge.¹¹

According to WHO, low birth weight (LBW) is a condition of infants with birth weight less than 2500 grams regardless of gestational age. In general, LBW is influenced by two factors, namely maternal factors and fetal factors. Maternal factors that affect LBW include maternal age during pregnancy (<20 years or >35 years and the distance between childbirth and pregnancy is too short), maternal condition (previous LBW history, working too hard, socioeconomic status, nutritional status), smoking, using drugs, alcoholics and mothers with health problems (severe anemia, preeclampsia, infections during pregnancy).¹² While fetal factors are caused by multiple pregnancies, hydramnios, chromosomal abnormalities, congenital defects and infections in the womb.¹³ The growth and development of infants with LBW is slower and impaired because during pregnancy they experience intrauterine growth retardation and will continue until the next age after birth. They often fail to keep up with the rate of growth they should have achieved at their age. If this situation continues with inadequate feeding, frequent infections and poor health services can lead to stunting (Proeverawati and Ismawati, 2010).¹⁴

The achievement of antenatal care services can be assessed from the coverage of K1 and K4.¹⁵ The results of interviews with the Coordinator of Midwives and Nutrition Practitioners of the Situraja Health Center in May 2022, showed that the coverage of antenatal care services in 2021 was still under target (K1=88.3%; K4=88.61%).¹⁶ They also said that the coverage of low birth weight infants in 2021 increased to 5.6%.¹⁷ Based on these data, stunting cases in toddlers aged 24-59 months in the working area of the Situraja Health Center in 2022 maybe caused by low antenatal care visits and high LBW cases. So the researcher is interested in conducting research on the relationship between Antenatal Care Visits and LBW with Stunting Incidence in Toddlers Aged 24-59 Months in the Working Area of the Situraja Health Center, Sumedang Regency in 2022.

2. METHOD

The design of this study used an analytic case-control study conducted by comparing the case group and control group based on their exposure status. Characteristics of case control research is the selection of research subjects based on the disease suffered to be observed whether exposed to risk factors or not. It can be used to assess the role of risk factors in disease occurrence (cause-effect relationship). This research uses an approach Retrospective where stunting is influenced by LBW factors and previous ANC visits. So that the independent variables in this study were antenatal care visits and LBW, while the dependent variable was the incidence of stunting in toddlers aged 24-59 months.

The population in this study were all toddlers aged 24-59 months who were weighed in the last one month in the working area of the Situraja Health Center amounting to 1,358. The research sample was 186 toddlers who were divided into a case group (93) and a control group (93) using the Proportional Random Sampling technique. According to Sugiyono (2014), Proportional Random Sampling is a sampling technique from members of the population using a random method without regard to the strata in the population. With this method the number of respondents per each village is multiplied by the number of samples required and the result is divided by the number of respondents from 15 villages.

The Maternal and Infant Cohort was chosen as the research instrument. Data analysis was carried out univariate and bivariate. Univariate analysis will produce a frequency distribution table. Meanwhile, bivariate analysis with Chi-Square test (p-value 0.05 interpretation and 5% precision) and Odds Ratio (table 2x2 and 95% CI) used SPSS for windows version 25.0 program.

3. RESULTS AND DISCUSSION

3.1. Results

3.1.1 Toddler Characteristics

Table 3.1 Characteristics of Toddlers in Research

Toddler Characteristics	n	%
Gender		
Male	90	48,4
Female	96	51,6
Total	186	100
Age		
2 – 3 years	58	31,2
3 – 4 years	79	42,5
4 – 5 years	49	26,3
Total	186	100

Based on table 3.1, it's known that most of the toddlers in this study were female as many as 96 people (51.6 %), and most of them were in the age range of toddlers 3-4 years as many as 79 people (42.5%).

3.1.2 Univariate Analysis

1. Description of Stunting Incidence

Frequency distribution of stunting in toddlers aged 24-59 months based on the characteristics of toddlers can be seen in the table below:

Table 3.2 Frequency Distribution of Stunting in Toddlers 24-59 months Based on the Characteristics of Toddlers

Characteristics of Toddler	Stunting Incidence				Total	
	Case		Control		n	%
	n	%	n	%		
Gender						
Male	41	44,1	49	52,7	90	48,4
Female	52	55,9	44	47,3	96	51,6
Total	93	100,0	93	100,0	186	100,0
Age						
2 – 3 years	33	33,5	25	26,9	58	31,2
3 - 4 years	45	48,4	34	36,6	79	42,5
4 – 5 years	15	16,1	34	36,6	49	26,3
Total	93	100,0	93	100,0	186	100,0

Table 4.2 showed that the most stunting cases occurred in female toddlers as many as 52 people (55.95%) and most suffered by toddlers aged 3-4 years as many as 45 people (48.4%).

2. Description of Antenatal Care (ANC) Visits

Frequency distribution of antenatal care visits for mothers toddler during pregnancy can be seen in the table below:

Tabel 3.3 Frequency Distribution of Antenatal Care Visits in Research

Antenatal Care Visits	n	%
Non-standardized	66	35,5
Standardized	120	64,5
Total	186	100,0

Table 4.3 showed that most of the toddler had mothers who made antenatal care visits according to the standard (at least 6 visits) during their pregnancy as many as 120 children (64.5%).

3. Description of Low Birth Weight (LBW)

Frequency distribution of toddlers based on history of LBW can be seen in the table below:

Table 3.4 Frequency Distribution of LBW History in Research

Low Birth Weight History	n	%
LBW	64	34,4
Not LBW	122	65,6
Total	186	100,0

Table 3.4 shows that most of the toddler in this study did not have low birth weight or were born with a weight of 2,500 grams as many as people 122 (65.6%).

3.1.3 Bivariate Analysis

1. Relationship between Antenatal Care Visits (ANC) with Stunting Incidence

The analysis results of antenatal care visits with stunting can be seen in the table below:

Table 3.5 Relationship between Antenatal Care Visits and Stunting Incidences in Toddlers Age 24-59 months

Antenatal Care Visits	Stunting Incidence				Total		OR 95 % CI	P-value
	Case		Control					
	n	%	n	%	n	%		
Non-standardized	49	52,7	17	18,3	66	35,5	4,979 (2,560-9,681)	0,000
Standardized	44	47,3	76	81,7	120	64,5		
Total	93	100,0	93	100,0	186	100,0		

Based on table 3.5, it's known that the case group of toddlers with mother who had a history of non-standard ANC visits (52.7%), compared to the control group (18.3%). The results of the Chi-Square statistical test obtained p value = 0.000 ($p < 0.05$), so it can be concluded that there is a significant relationship between antenatal care visits and the incidence of stunting in toddlers aged 24-59 months in the working area of Situraja Health Center.

In addition, the results of the odds ratio calculation showed that toddlers whose mother have a history of antenatal care visits non-standardized have a 4.979-fold risk of experiencing stunting compared to toddler whose mothers have a history of antenatal care visits as standardized (95% CI 2,560 - 9,681).

2. Relationship between Low Birth Weight Infants with Stunting Incidence

The analysis results of relationship between LBW and stunting can be seen in the table below:

Table 3.5 Relationship between LBW and Stunting Incidences in Toddlers Age 24-59 months

LBW History	Stunting Incidence				Total		OR 95 % CI	P-value
	Case		Control					
	n	%	n	%	n	%		
LBW	48	51,6	16	17,2	64	34,4	5,133 (2,614-10,080)	0,000
Not LBW	45	48,4	77	82,2	122	65,6		
Total	93	100,0	93	100,0	186	100,0		

Based on table 4.6, it's known that in the case group there were more toddlers who had a history of low birth weight (51.6%), compared to the control group (17.2%). The results of the Chi-Square statistical test obtained a value of $p = 0.000$ ($p < 0.05$), thus it can be concluded that there is a significant relationship between the history of LBW with stunting incidence in toddlers aged 24-59 months in the working area of the Situraja Health Center.

In addition, the results of the odds ratio calculation showed that toddlers who had a history of LBW are at risk of 5,133 times experiencing stunting compared to toddlers who didn't have a history of LBW (95% CI 2,614 – 10,080).

3.2. Discussion

3.2.1 Univariate Analysis

1. Description of Stunting Incidences

The table of stunting frequency distribution in toddlers aged 24-59 months based on the gender of the research subjects, it's known that there were more stunting cases in the female toddler group (55.9%) compared to male toddlers (44.1%). According to the age range of toddlers, stunting cases in the working area of the Situraja Health Center mostly occurred at the age of 3-4 years (48.4%), then toddlers aged 2-3 years (33.5%) and the least was toddlers aged 4-5 years (16.1%).

According to Ernawati (2020) toddlers aged 25-59 months are one of the groups of people who easily experience nutritional problems. The older the child, the wider the interaction with the environment. Children aged 3-5 years can play alone without the company of their parents. Parental control of poor hygiene will increase the risk of children getting infectious diseases such as diarrhea and ARI. Infectious diseases are highly contagious and attack children because they do not have a good immune system (Hermayani et al., 2020).¹⁸ It will be at risk of causing stunting after going through several processes.

Both boys and girls have a risk of experiencing nutritional problems, especially stunting if the methods and practices in feeding are not appropriate and the mother's parenting pattern is not good (Adani et al., 2017).¹⁹ The first things that toddlers need from their parents for their growth and development is the provision of nutritious food in order to get good physical and mental abilities, both in terms of quantity and quality. But along with the modernization process, the mother's parenting style in giving food to toddlers has actually changed and becomes less selective. Increasingly open access from cities to villages or otherwise, this could be one of the main reasons for the easy trade of instant food to the village. But in fact, the quality of instant food is currently being debated and is believed to lack good nutritional content such as containing artificial sweeteners, artificial coloring and even preservatives that are harmful to their body. If mothers continue to provide food to toddlers without paying attention to balanced nutrition, then toddlers are at risk of experiencing nutritional problems including stunting.

Researcher assume that stunting in toddlers in the working area of the Situraja Health Center is caused by parenting patterns in providing energy intake and weaning food. If the mother didn't pay attention to the diversity of food and the nutrients contained in it, it can make children quickly get bored with the menu and become lazy to eat. Many children are only given two or three types of food, so their nutritional needs are not met perfectly. This is considered more practical, easier, time-saving and cost-effective. In addition, health practices for toddlers such as being taught to wash their hands before and after eating or after defecating have not been fully implemented. If it's exacerbated by poor sanitation in the home environment, toddlers will be susceptible to infectious diseases that can inhibit the metabolic process of nutrients in their body.

2. Description of Antenatal Care Visits

The table of antenatal care visits frequency distribution in the working area of the Situraja Health Center based on univariate analysis was that there were 120 people with mothers who made ANC visits according to the standard (≥ 6 times). While toddlers with mother who did not meet the standard ANC visits (< 6 times) only 66 people (35.5%).

Standard of ANC visits are at least 6 times during pregnancy, and at least 2 examinations by a doctor in the first and third trimesters. Health services obtained by mothers during ANC visits include anamnesis, monitoring the condition of the mother and fetus, recognizing high risks, advice and counseling in order to get a healthy pregnancy and baby. Pregnancy check-up is one of the health efforts aimed at early detection of complications during pregnancy that can prevent low birth weight infants which can cause stunting in children (Ramli, 2017).²⁰ This theory is proven by research by Zurhayati and Hidayah (2022) which showed that there was a significant relationship between ANC visits and the incidence of stunting (p-value 0.004) due to the large number of K1 (first visit of pregnant women) for pregnant women at five to seven months of gestation.²¹

3. Description of Low Birth Weight

The table of antenatal care visits frequency distribution in the working area of the Situraja Health Center based on univariate analysis showed that in the case toddlers with history of LBW as many as

48 people (51.6%) and those without history of LBW as many as 45 people (48.4%). While in the control group toddlers with history of LBW as many as 16 people (17.2%) and those without history of LBW as many as 77 people (82.2%).

According to WHO, low birth weight (LBW) is a condition of infants with birth weight less than 2500 grams regardless of gestational age. The growth and development of infants with LBW is slower and impaired because during pregnancy they experience intrauterine growth retardation and will continue until the next age after birth. They often fail to keep up with the rate of growth they should have achieved at their age. If this situation continues with inadequate feeding, frequent infections and poor health services can lead to stunting (Proeverawati and Ismawati, 2010).¹⁴

This theory is proven by research from Nainggolan (2019) which showed that there is a significant relationship between low birth weight and the incidence of stunting in children. The odds ratio value obtained is 25.5, it means that infants with low birth weight have a 25 times risk of experiencing stunting compared to infants with normal birth weight.²² This is due to toddlers with low birth weight have a higher susceptibility to infectious diseases, diarrhea disorders and lower respiratory tract infections as well as an increase in complications including anemia, fatigue, and loss of appetite which can lead to suboptimal physical growth.

3.2.2 Bivariate Analysis

1. Relationship between Antenatal Care Visits (ANC) with Stunting Incidence

Based on the analysis results obtained from this study, it showed that there was a statistically significant relationship (p -value $0,000 < 0.05$) between Antenatal Care (ANC) visits with the stunting incidence in toddlers aged 24-59 months. The proportion of non-standardized ANC visits was more common in the case group (52.7%) compared to the control group (18.3%). ANC visits that non-standardized may have a risk of 4.979 times experiencing stunting than non-stunted toddlers aged 24-59 months (OR; 95% CI 2.560-9.681).

Antenatal care is a health service for pregnant women to diagnose obstetric complications and to provide information about lifestyle, pregnancy and childbirth. It can be used to detect early occurrence of high risk pregnancy and childbirth so as to reduce maternal mortality and monitor the condition of the fetus. During the ANC visit, pregnant women will receive a thorough prenatal care, including nutritional counseling, providing folic acid and iron supplements, as well as proper health education. It can prevent mothers from getting anemia, prevent mothers from giving birth prematurely, and babies getting adequate nutrition while in the womb which can reduce the increase in the incidence of stunting in toddlers (Hutasoit et al., 2019).²³ This theory is proven by Permatasari's research (2019) which showed that there is a relationship between Antenatal care (ANC) visits with stunting incidence in children (an OR = 22.8), it means that mothers who did not meet the standard of ANC visit at risk of 22.8 times getting a child with stunting. If the antenatal care visit is non-standardized, the health of mother and fetus is not properly monitored, so there is a risk of having a stunted child.³

Researcher assume that the low coverage of antenatal care visits in the stunting toddler group in the working area of the Situraja Health Center is influenced by government policies against the Covid-19 pandemic in 2020-2021 and there are still many cases of Unwanted Pregnancy that occurred in the past 2 to 3 years. ANC services during the pandemic experienced obstacles due to a shift in health system resources towards controlling Covid-19 as well as a shortage of medicines and essential supplies for the provision of routine MCH services. The high risk of spreading the Covid-19 virus in health services has resulted in health facilities making adjustments and restrictions on service operations, including antenatal care services. This causes antenatal care visits to decreased because pregnant women didn't want to visit health services due to anxiety and fear of contracting Covid-19. Some cases of unwanted pregnancy are caused by mothers not using any type of contraception (unmeet KB) and teenage premarital pregnancies. Women who experience an unwanted pregnancy are usually late for a prenatal check-up and do it once only when they are sick, this is because they feel ashamed and afraid to report it. Whereas unwanted pregnancy requires good ANC to prevent maternal and infant mortality.

2. Relationship between Low Birth Weight Infants with Stunting Incidence

Based on the analysis results obtained from this study, it showed that there was a statistically significant relationship (p -value $0,000 < 0.05$) between low birth weight (LBW) with stunting incidence in toddlers aged 24-59 months. Toddlers who had a history of LBW in the case group more (51.6%) compared to the control group (17.2%). Toddlers with history of LBW may have a risk of 5.133 times experiencing stunting than those who not stunted at the age of 24-59 months (OR ; 95% CI 2.614-10.080).

Low birth weight is a picture of public health malnutrition including long-term malnutrition, poor health, work hard and poor health care and pregnancy. Individually, LBW is an important predictor of the health and survival of newborns and is associated with high risk in children (Kemenkes RI, 2010).²⁴ Birth weight in general is closely related to long-term growth and development. Thus, the continued impact of LBW can be in the form of failure to growth (growth faltering). A baby born with LBW will find it difficult to catch up with early growth lags. Growth that lags behind normal will cause the child to become stunted (Oktarina, 2012).²⁴

This theory is proven by research from Arie, et al (2022) which showed a relationship between Low Birth Weight (LBW) with stunting incidence at the Nosarara Public Health Center Palu with a p value of 0.0001 (p value < 0.05).²⁵ In Lidia Fitri's research (2018), the factors that cause low birth weight babies are caused by the nutritional status of the mother during pregnancy.²⁶ Mothers who are malnourished at the time of entering the third trimester are likely to give birth to babies with low birth weight. In another study it was also explained that poor fetal growth in the first 2 years of life causes permanent damage, including height, brain growth that is not optimal (Aryastami et al., 2017).²⁷

Researcher assumed that the high cases of LBW in the stunting toddler group in the working area of the Situraja Health Center were caused by pregnant women with KEK (Chronic Energy Deficiency) and premature babies. The nutritional condition of mother before and during pregnancy can affect the nutritional status of mother. Mothers who had a history of chronic energy deficiency during pregnancy can inhibited the growth process of the fetus, so she is at risk of giving birth to babies with low birth weight and at risk of having stunting children. In addition, premature babies have a greater risk of becoming stunted compared to babies born at term. They are not only smaller than normal babies, but can also have a variety of physical and developmental problems, usually related to the function of immature organs, including the lungs, brain and heart. They also have a risk of being susceptible to infection, this repeated infection can increase the risk for stunting.

4. CONCLUSION

Based on the results of research conducted regarding the relationship between antenatal care visits (ANC) and low birth weight (LBW) on the incidence of stunting in toddlers aged 24-59 months in the working area of the Situraja Health Center, Sumedang Regency in 2022, it can be concluded as follows:

1. The incidence of stunting in toddlers aged 24-59 months based on gender and age range of toddlers showed that the majority of stunting occurred in female toddlers as many as 52 people (55.95%) and is dominated by toddlers with an age range of 3-4 years as many as 45 people (48.4%).
2. Toddlers with mother who had a history of non-standardized ANC visits (52.7%) were found in the case group (stunted) compared to toddlers in the control group (not stunted) (18.3%).
3. Most of toddlers with history of low birth weight (51.6%) were found in the case group, while in the control group only (17.2%).
4. There is a significant relationship between antenatal care (ANC) visits and low birth weight (LBW) with the incidence of stunting in toddlers 24-59 months in the working area of the Situraja Health Center, Sumedang Regency in 2022 with a p -value of 0.000 each (< 0.05).

REFERENCES

- Siregar, S. H., & Siagian, A. (2021). Hubungan Karakteristik Keluarga dengan Kejadian Stunting pada Anak 6–24 bulan di Kabupaten Langkat. *Tropical Public Health Journal*, 1(1), 1-8. Retrieved from <http://dx.doi.org/10.32734/trophico.v1i1.6049>
- Heryanto, M. L. (2021). Kunjungan Antenatal Care dengan Kejadian Stunting pada Anak Usia 24–36 Bulan. *Jurnal Ilmiah PANNMED (Pharmacist, Analyst, Nurse, Nutrition, Midwifery, Environment, Dentist)*, 16(1), 1-8. Retrieved from <http://dx.doi.org/10.36911/pannmed.v1i1.1043>
- Hapsari, A., Fadhilah, Y., & Wardhani, H. E. (2022). Hubungan Kunjungan Antenatal Care dan Berat Badan Lahir Rendah terhadap Kejadian Stunting di Kota Batu. *JI-KES (Jurnal Ilmu Kesehatan)*, 5(2), 108-114. Retrieved from <http://dx.doi.org/10.33006/ji-kes.v5i2.258>

- Simbolon, D., Mahyuddin, M., Okfrianti, Y., & Sari, A. P. (2022). Peningkatan Perilaku Ibu dalam Pemenuhan Kebutuhan Gizi Baduta Berisiko Stunting melalui Pemberdayaan Kader. *Empowerment: Jurnal Pengabdian Masyarakat*, 1(4), 421-431. Retrieved from <http://dx.doi.org/10.55983/empics.v1i4.167>
- RRI.CO.ID. 2021. *Stunting Indonesia Tertinggi Kedua di Asia Tenggara*. Retrieved from <https://rri.co.id/nasional/peristiwa/1031576/stunting-indonesia-tertinggi-kedua-di-asia-tenggara>
- Antara News. 2021. *Prevalensi dan Jumlah Balita Stunting Di Dunia 2021*. Retrieved from <https://antaranews.com/joint-child-malnutrition-estimates-2016-2021>
- Data Publikasi Stunting Sumedang Dinas Kesehatan Tahun 2021.
- Rekapan Hasil Kegiatan Bulan Penimbangan Balita Puskesmas Situraja Tahun 2022.
- Islam, M. M., & Masud, M. S. (2018). Determinants of frequency and contents of antenatal care visits in Bangladesh: Assessing the extent of compliance with the WHO recommendations. *PLoS one*, 13(9). Retrieved from <http://dx.doi.org/10.1371/journal.pone.0204752>
- Pedoman Pelayanan Antenatal, Persalinan, Nifas, Dan Bayi Baru Lahir Di Era Adaptasi Kebiasaan Baru Revisi 2. 2020. *Kemenkes RI*. Retrieved from <https://covid19.go.id/storage/app/media/Materi%20Edukasi/2020/Oktober/revisi-2-a5-pedoman-pelayanan-antenatal-persalinan-nifas-dan-bbl-di-era-adaptasi-kebiasaan-baru.pdf>
- Rachmawati, A. I., Puspitasari, R. D., & Cania, E. (2017). Faktor-Faktor yang Memengaruhi Kunjungan Antenatal Care (Anc) Ibu Hamil. *Jurnal Majority*, 7(1), 72-76. Retrieved from <https://juke.kedokteran.unila.ac.id/index.php/Majority/Article/View/1748>
- Sulistiyorini, D., & Putri, S. S. (2015). Analisis faktor-faktor yang mempengaruhi kejadian BBLR di Puskesmas Pedesaan Kabupaten Banjarnegara tahun 2014. *Jurnal Ilmiah Medsains*, 1(1), 23-29. Retrieved from <https://jurnal.polibara.ac.id/index.php/medsains/article/view/37>
- Sembiring, J. B., Pratiwi, D., & Sarumaha, A. (2019). Hubungan Usia, Paritas dan Usia Kehamilan dengan Bayi Berat Lahir Rendah di Rumah Sakit Umum Mitra Medika Medan. *Jurnal Bidan Komunitas*, 2(1), 38-46. Retrieved from <https://ejournal.helvetia.ac.id/index.php/jbk/article/view/4110>
- Rahmadi, A. (2017). Hubungan Berat Badan dan Panjang Badan Lahir dengan Kejadian Stunting Anak 12-59 bulan di Provinsi Lampung. *Jurnal Ilmiah Keperawatan Sai Betik*, 12(2), 209-218. Retrieved from <http://www.ejurnal.poltekkes-tjk.ac.id/index.php/JKEP/article/view/601>
- Profil Dinas Kesehatan Kabupaten Sumedang Tahun 2020
- Laporan Tahunan Cakupan Kunjungan KI dan K4 Puskesmas Situraja Tahun 2021
- Laporan Tahunan Cakupan Berat Bayi Lahir Rendah Puskesmas Situraja Tahun 2021
- Ernawati, A. (2020). Gambaran Penyebab Balita Stunting di Desa Lokus Stunting Kabupaten Pati. *Jurnal Litbang: Media Informasi Penelitian, Pengembangan Dan IPTEK*, 16(2), 77-94. Retrieved from <http://dx.doi.org/10.33658/jl.v16i2.194>
- Adani, F. Y., & Nindya, T. S. (2017). Perbedaan asupan energi, protein, zink, dan perkembangan pada balita stunting dan non stunting. *Amerta Nutrition*, 1(2), 46-51. Retrieved from <http://dx.doi.org/10.20473/amnt.v1i2.2017.46-51>
- Ramli, N. (2017). Pengaruh pendampingan oleh masyarakat terhadap penerapan asuhan kebidanan pada ibu hamil di kabupaten aceh Besar. *Action: Aceh Nutrition Journal*, 2(2), 137-148. Retrieved from <http://dx.doi.org/10.30867/action.v2i2.68>
- Zurhayati, Z., & Hidayah, N. (2022). Faktor yang Berhubungan dengan Kejadian Stunting pada Balita. *JOMIS (Journal of Midwifery Science)*, 6(1), 1-10. Retrieved from <http://jurnal.univrab.ac.id/index.php/jomis/article/view/1730>
- Nainggolan, R. (2019). Pengaruh Faktor Ibu dan Anak terhadap Kejadian Stunting pada Anak Usia 24-36 Bulan di Kabupaten Serdang Bedagai. Retrieved from <https://repositori.usu.ac.id/handle/123456789/27633>
- Hutasoit, M., Utami, K. D., & Afriyiliani, N. F. (2020). Kunjungan Antenatal Care Berhubungan dengan Kejadian Stunting. *Jurnal Kesehatan Samodra Ilmu*, 11(1), 38-47. Retrieved from <https://stikes-yogyakarta.e-journal.id/JKSI/article/view/13>
- Murti, F. C., Suryati, S., & Oktavianto, E. (2020). Hubungan Berat Badan Lahir Rendah (BBLR) dengan Kejadian Stunting pada Balita Usia 2-5 Tahun di Desa Umbulrejo Kecamatan Ponjong Kabupaten Gunung Kidul. *Jurnal Ilmiah Kesehatan Keperawatan*, 16(2), 52-60. Retrieved from <http://dx.doi.org/10.54630/jk2.v11i2.120>
- Maineny, A., Silfia, N. N., & Usman, H. (2022). Low Birth Weight with Stunting Incidence for Toddlers Age 12-59 Months: Berat Badan Lahir Rendah dengan Kejadian Stunting Pada Balita Umur 12-59 Bulan. *Napande: Jurnal Bidan*, 1(1), 9-14. Retrieved from <https://doi.org/10.33860/njb.v1i1.982>

-
- Fitri, L. (2018). Hubungan BBLR dan Asi Eksklusif dengan Kejadian Stunting di Puskesmas Lima Puluh Pekanbaru. *Jurnal Endurance: Kajian Ilmiah Problema Kesehatan*, 3(1), 131-137. Diakses 26 Juni 2022 melalui <http://103.111.125.15/index.php/endurance/article/view/1767>
- Yadika, A. D. N., Berawi, K. N., & Nasution, S. H. (2019). Pengaruh stunting terhadap perkembangan kognitif dan prestasi belajar. *Jurnal Majority*, 8(2), 273-282. Retrieved from <https://juke.kedokteran.unila.ac.id/index.php/majority/article/view/2483>

THE EFFECT OF STRESS LEVEL ON MENSTRUAL CYCLE IN FINAL STUDENTS AT THE FACULTY OF HEALTH SCIENCES UNIVERSITY OF APRIL ELEMENT

Evi Sonjati¹, Dinda Noviana Hidayat²

Public Health Science Study Program
Faculty of Health Science, Sebelas April University
Email: evisonjati@unsap.id

Article Info

Article history:

Received April 29, 2022
Revised Mei 02, 2022
Accepted Mei 9, 2022

Keywords:

Toddlers
LBW (Low Birth Weight)
Antenatal Care Visits
Stunting

ABSTRACT

Menstruation or as know as haid in Indonesia is physiological changes in a woman's body that occur periodically and are influenced by reproductive hormones. Stress is a physiological and behavioral response of humans trying to regulate and adapt to both internal and external stresses. Physical activity is any form of body movement produced by skeletal muscles that requires energy. There are two variables in this research, namely the independent variable and the dependent variable. The type of this research is quantitative research that is descriptive cross sectional. The results of the statistical tests used univariate analysis and bivariate analysis using the Uji Chi-Square Test to determine the relation between the variables studied. This research shows that there is a significant relation between stress levels and menstrual cycle patterns with the acquisition of p-value 0,006, and there is no significant relation between physical activity and menstrual cycle patterns with p-value 0,092. The results of the research, it can be concluded that the stress level variable has a relation with the menstrual cycle pattern in female students in Faculty of Ilmu Kesehatan Universitas Sebelas April in 2022. And the physical activity variable has no relation with the menstrual cycle pattern in female students in Faculty of Ilmu Kesehatan Universitas Sebelas April in 2022. It is hoped that female students can be used as input and evaluation materials related to the relation between stress levels and physical activity on female students in Faculty of Ilmu Kesehatan Universitas Sebelas April in 2022.



Copyright © 2022 PHSAJ. All rights reserved.

Corresponding Author:

Evi Sonjati
Public Health Science Study Program,
Faculty of Health Science, Sebelas April University,
Jl. Cipadung No.54, Kotakaler, Sumedang Utara, Sumedang, Jawa Barat 45621, Indonesia.
Email: evisonjati@unsap.ac.id

1. INTRODUCTION

Stress is a physiological and behavioral response of humans trying to regulate and adapt to both internal and external stresses. Stress or stressors stimulate the HPA (hypothalamus-pituitary-adrenal cortex) axis, so that the hormone cortisol will cause hormonal imbalances including reproductive hormones and an irregular menstrual cycle will occur. According to the World Health Organization, physical activity is all forms of body movement produced by skeletal muscles that require energy expenditure. Menstruation or menstruation is a physiological change in a woman's body that occurs periodically and is influenced by reproductive hormones.

Menstrual periods usually occur every month between the ages of puberty and menopause. (Sri Martini, p-18 2021) Menstrual cycle disorders consist of 2 kinds, namely polimenorrhoea and oligomenorrhoea.

Polymenorrhea is a menstrual cycle with a number of days spanning less than 21 days and or blood volume equal to or more than the usual menstrual blood volume. Oligomenorrhea is a menstrual cycle with a duration of more than 35 days. The volume of bleeding is generally less than the volume of normal menstrual bleeding. This type of disorder results in infertility in the long term because eggs are rarely produced so fertilization does not occur (Farida, p-14, 2019). According to the World Health Organization (WHO) in 2015 it was stated that the problem of adolescents in the world is around problems regarding menstrual disorders (38.45%). According to 2018 Basic Health Research data, most 68% of women in Indonesia aged 10-59 years reported regular menstruation and 13.7% experienced irregular menstrual cycle problems in the last 1 year due to excessive physical activity such as excessive exercise. resulting in drastic weight loss. In West Java, the percentage of women aged 10-59 years who experience irregular menstruation is 14.4%. (Risksedas, 2018). The percentage of irregular menstruation in West Java is influenced by several things, such as hormonal imbalance, weight, age and physical activity. According to the Research Journal of Wulan and Yanti about "Self Hypnosis Has Influence In Reducing Menstrual Pain Levels in Young Women at SMKN 2 Sumedang" Mentioned that the menstrual cycle is irregular in Sumedang Regency, especially in the first year after menarche, around 80% of young women experience delayed menstruation 1 to 2 weeks and about 7% of adolescent girls whose menstruation comes earlier, due to ovulation that has not yet occurred (Wulan and Yanti, 2020). According to the results of Kartini's research at the University of North Sumatra on undergraduate nursing students, it was stated that (62.7%) experienced irregular menstrual cycles and (32.3%) experienced regular menstrual cycles. In addition, Debora's research in 2013 said that menstruation was not normal (46%) and menstruation was normal (60%). The cause of irregular menstruation is due to lack of physical activity and the influence of high stress.

According to a preliminary survey on April 16, 2022 conducted at the Faculty of Health Sciences, Sebelas April University, Sumedang, 10 students from grades 1-4 both from the Public Health and Nursing study programs found that 6 female students (60%) had abnormal menstrual cycles and 4 female students (40%) experienced normal menstrual cycles. And respondents said that they often experience excessive anxiety, unstable emotions, tired easily, and not eager to carry out activities.

2. METHOD

The type of research used is a quantitative descriptive cross sectional research. Descriptive research is a research conducted to describe or describe a phenomenon that occurs in society. Cross sectional research is a study that approaches, observes, or collects data all at once (point time approach), (Notoatmodjo, 2018).

3. RESULTS AND DISCUSSION

No	Category	Frequency	Percentage
1	Normal	35	44,9%
2	Abnormal	43	55,1%
	Total	78	100%

Source: Primary Data

It can be seen that the percentage of respondents mostly with the category of abnormal menstrual cycle patterns as many as 43 (55.1%) respondents.

2. Stress level

No	Category	Frequency	Percentage
1	Normal	22	8,2%
2	Light	39	50%
3	Currently	13	16,7%
4	Critical	4	5,1%
	Total	78	100%

Source: Primary Data

it can be seen that the percentage of respondents mostly with mild stress category as many as 39 (50%) respondents.

3. Physical activity

No	Category	Frequency	Percentage
1	Tall	22	28,2%
2	Low	56	71,8%
	Total	78	100%

Source: Primary Data

it can be seen that the percentage of respondents is mostly in the low category as many as 56 (71.8%) respondents.

a. bivariate analysis

1. The relationship between stress levels and menstrual cycle patterns

No	Independent variable	Category	Dependent variable	Total F (%)	P-Value	
1	Stress		Menstrual cycle pattern		0,006	
			Normal	Abnormal		
			F (%)	F (%)		
		Normal	5 (14,3%)	17 (39,5%)		22
		Light	17 (48,6%)	22 (51,2%)		39
		Currently	9 (25,7%)	4 (9,3%)		13
		Critical	4 (11,4%)	0 (0,0%)		4
	<i>Total</i>	35 (100%)	43 (100%)	78 (100%)		

The table above explains the relationship between stress and menstrual cycle patterns among female students at the Faculty of Health Sciences, Universitas Sebelas April 2022, where 22 people are normal, 39 people are mild, 13 people are moderate, and 4 people are severe, with a total of 78 respondents.

From statistical calculations, it was found that the p value was 0.006 with a value of $\alpha = 0.05$, meaning that the p value had a relationship between stress and menstrual cycle patterns in female students at the Faculty of Health Sciences, Sebelas April University in 2022.

2. The relationship between physical activity and menstrual cycle patterns

No	Independent variable	Category	Dependent variable	Total F (%)	P-Value	
1	Physical activity		Menstrual cycle pattern i		0,092	
			Normal	Abnormal		
			F (%)	F (%)		
		Tall	13 (59,1%)	9 (40,9%)		22
	Low	22 (39,3%)	34 (60,7%)	56		

<i>Total</i>	35	43	78
	(100%)	(100%)	(100%)

tween physical activity and menstrual cycle patterns in female students at the Faculty of Health Sciences, Sebelas April University in 2022, where 22 people are high and 56 people are low with a total of 78 respondents. From statistical calculations, it was found that the p value was 0.092 with a value of $\alpha = 0.05$, which means that there is no relationship between physical activity and menstrual cycle patterns in female students at the Faculty of Health Sciences, Sebelas April University in 2022.

4. DISCUSSION

In this section, the authors present the results of research based on the results of data processing and questionnaires from 78 respondents statistically univariate and bivariate statistics regarding the relationship between stress levels and physical activity on menstrual cycle patterns in students of the Faculty of Health Sciences, Sebelas April University in 2022.

1. Univariate analysis

a. Menstrual cycle pattern

Based on the results of statistical tests on menstrual cycle patterns, it can be seen that the percentage of respondents at the Faculty of Health Sciences, Sebelas April University in 2022, mostly in the category of abnormal menstrual cycle patterns, namely 43 respondents (55.1%).

The menstrual cycle pattern is a pattern that describes the distance between the first day of menstruation and the first day of the next menstruation. The menstrual cycle pattern is said to be normal if it is not 28-35 days and does not exceed 35 days. The pattern of the menstrual cycle is influenced by age, stress levels, drugs, contraceptives in the womb, pregnancy and pregnancy disorders, and genetic disorders (Nurul Aini, 2017).

This is similar to Sri Martini's (2021) research on "The Correlation of Academic Stress Levels With Menstrual Cycle During the Covid-19 Pandemic At SMA Muhammadiyah 2 Palembang" with the results of a study of 44 respondents that 26 respondents (59.1%) experienced irregular menstrual cycle patterns. normal due to stress due to online learning, causing abnormal menstrual cycles.

Thus, researchers assume that the pattern of the menstrual cycle can change due to several factors including: stress, hormonal changes, food, and physical activity. Likewise, from the research results obtained by researchers that female students at the Faculty of Health Sciences, Sebelas April University experienced irregular menstrual cycle patterns due to the stress faced by female students. So in particular, stress can cause hormonal imbalances where hormones can affect ovarian function and make menstrual periods shorter. So the higher the stress level, the more cortisol levels are produced by the body.

b. Stress

Based on the results of the stress level statistical test, it can be seen that the percentage of respondents in students at the Faculty of Health Sciences, Sebelas April University in 2022, mostly with the category of mild stress levels, namely 39 respondents (50%).

Stress is a general pattern of reactions and adaptations, in the sense that the pattern of reactions to stressors, which can come from within or outside the individual concerned, can be real or unreal (Musrakidinur, 2016). Stress has several levels including mild, moderate, and severe stress (Priyoto, 2019).

This is similar to Pande Putu Novi's (2020) research on "The Relationship between Stress Levels and Menstrual Changes in Adolescents" with the results of a study of 92 respondents that 59 respondents (64%) experienced moderate levels of stress caused by the tension of preparing for exams, causing teenage girls to go to junior high school. experiencing stress.

Researchers assume that stress is a change in the reaction of a person's body when facing a new threat, pressure or situation. When faced with stress, the body releases the hormones cortisol and adrenaline. In such conditions, the heart rate and blood pressure will increase so that breathing becomes faster and the

muscles in the body become more tense. And when stressed, the part of the brain that regulates the menstrual cycle (hypothalamus) will be disturbed. In this condition, the hormones that regulate the menstrual cycle are produced not in balance so that menstruation becomes irregular.

c. Physical activity

Based on the results of statistical tests of physical activity, it can be seen that the percentage of respondents in students at the Faculty of Health Sciences, Sebelas April University in 2022, mostly with low physical activity categories, namely 56 respondents (71.8%).

The World Health Organization states that physical activity is any form of body movement produced by skeletal muscles that requires energy expenditure. Not doing physical activity has been identified as the fourth highest cause of global mortality (6% of global deaths) (WHO, 2017).

This is similar to Putri Anindita's research (2016) on "The Correlation of Daily Physical Activity with Menstrual Disorders in Students of the Faculty of Medicine, Andalas University" with the results of a study of 90 respondents that 30 respondents did moderate physical activity such as walking and doing sports.

Researchers assume that physical activity is a body movement that increases energy expenditure or energy and energy burning. Physical activity itself is categorized as sufficient if someone does physical exercise or sports for 30 minutes every day or at least 3-5 days a week. Physical activity itself affects the pattern of the menstrual cycle as well.

2. Bivariate analysis

a. The relationship between stress levels and menstrual cycle patterns in female students at the Faculty of Health Sciences, Universitas Sebelas April 2022

From the results of statistical tests obtained p value = 0.006 ($p < 0.05$), it can be concluded that there is a relationship between stress levels and menstrual cycle patterns in female students at the Faculty of Health Sciences, Sebelas April 2022. According to WHO (2003) stress is a reaction/response body against psychosocial stressors (mental stress/life burden (Priyoto, 2014) while the menstrual cycle pattern is a pattern that describes the distance between the first day of menstruation and the first day of the next menstruation. The menstrual cycle pattern is said to be normal if it is not less than 21 days and does not exceed 35 days (Yudita, 2017). Irregular menstrual cycle patterns in students of the Faculty of Health Sciences, Sebelas April University are caused by academic stress, where academic stress is a subjective perception of an academic condition or response experienced by a person (student) either in the form of physical reactions, negative behaviors, thoughts, and emotions that arise as a result of demands school or academic. Most students from the Faculty of Health Sciences, Sebelas April University experience stress that starts from the mind because of the tight academic demands.

A similar study was conducted by Kartini (2019) at the University of North Sumatra on nursing students that the stress experienced by students of the nursing science faculty at the University of North Sumatra was mostly due to intense academic stress. this is evidenced by the results of the test, the value obtained is $p = 0.001$, meaning that there is a relationship between stress levels and the menstrual cycle in nursing students at the University of North Sumatra.

Thus, researchers assume that stress is a factor that affects the pattern of the menstrual cycle. Because stress stimulates the HPACA or hypothalamus pituitary adrenal cortex axis so that the hormone cortisol is produced. The hormone cortisol causes hormonal imbalances including reproductive hormones, thus affecting the pattern of the menstrual cycle. The ways to regulate the pattern of the menstrual cycle include:

1. Get enough rest
2. Manage stress, because stress can make menstrual cycle patterns irregular
3. Eat nutritious food
4. Doing enough physical activity

Thus the pattern of the menstrual cycle will return to normal.

b. The relationship between physical activity and menstrual cycle patterns in female students at the Faculty of Health Sciences, Universitas Sebelas April 2022

From the statistical test results obtained p value = 0.092 ($p > 0.05$) it can be concluded that there is no significant relationship between physical activity and menstrual cycle patterns in female students at the Faculty of Health Sciences, Sebelas April University in 2022. Physical activity is every movement of the body due to skeletal muscle activity resulting in energy expenditure. Physical activity consists of activities during work, sleep, and in leisure time. Everyone performs physical activity, or varies from one individual to another depending on the individual's lifestyle and other factors such as gender, age, occupation, and others. Physical activity is highly recommended to all individuals to maintain health. Physical activity is also the key to determining energy use and the basis for balanced energy. Various types and amounts of physical activity are needed for different health outcomes (Kristanti, 2002). Most of the physical activity carried out by students of the Faculty of Health Sciences is low so that there is a relationship between physical activity and menstrual cycle patterns.

This is in line with Hanny Fitriani's (2021) research on the relationship between the level of physical activity and the menstrual cycle in adolescents at the Surabaya City Citizen High School which shows that there is no relationship between the level of physical activity and the menstrual cycle in adolescents at the Surabaya City Citizen High School. obtained $p = 0.717$. So physical activity does not affect the menstrual cycle.

Thus, the researcher assumes that the intensity of physical activity is not one of the causes of irregular menstrual cycle patterns in female students at the Faculty of Health Sciences, Sebelas April University in 2022. This is because low physical activity causes more normal menstrual cycles. Women who have light physical activity have regular menstrual cycles compared to women who have strenuous physical activity. In the study of Amaza et al, it was stated that there was no relationship between physical activity and dysmenorrhea in medical students in Nigeria. The study used a questionnaire aimed at obtaining data on age at menarche, menstrual pattern, dysmenorrhea, marital status, exercise, BMI and diet. The data is only dysmenorrhea associated with physical activity and the p value = 0.38.

In Kroll's study also found no relationship between physical activity and menstrual disorders in women at the University of Massachusetts, this study was conducted on 186 women aged 18-30 years. The only menstrual disorder studied by Kroll is premenstrual syndrome.

5. CONCLUSION

Based on this study, a conclusion was obtained regarding the relationship between stress levels and physical activity with menstrual cycle patterns in female students at the Faculty of Health Sciences, Sebelas April University in 2022, namely:

1. An overview of the menstrual cycle pattern of female students at the Faculty of Health Sciences, Sebelas April University in 2022. From the results of the study, it can be seen that the percentage of respondents mostly in the category of abnormal menstrual cycle patterns, as many as 43 respondents (55.1%).
2. An overview of the stress level of students at the Faculty of Health Sciences, Sebelas April University in 2022. From the results of the study, it can be seen that the percentage of respondents mostly in the category of mild stress, as many as 39 respondents (50%)
3. A description of the physical activity of female students at the Faculty of Health Sciences, Sebelas April University in 2022. From the results of the study, it can be seen that the percentage of respondents mostly in the low physical activity category is 56 respondents (71.8%).
4. The relationship between stress levels and menstrual cycle patterns. From the statistical test results obtained p value = 0.006 ($p < 0.05$), it can be concluded that there is a relationship between stress levels and menstrual cycle patterns in female students at the Faculty of Health Sciences, Sebelas April University in 2022.
5. The relationship between physical activity and menstrual cycle patterns. From the statistical test results obtained p value = 0.092 ($p > 0.05$), it can be concluded that there is no significant

relationship between physical activity and menstrual cycle patterns in female students at the Faculty of Health Sciences, Sebelas April University in 2022.

REFERENCES

- Angelina, C., Fakultas, F., Masyarakat, K., Malahayati, U., & Lampung, B. (N.D.). FAKTOR-FAKTOR YANG BERHUBUNGAN DENGAN DETEKSI DINI KANKER LEHER RAHIM DI KECAMATAN GISTING KABUPATEN TANGGAMUS LAMPUNG.
- Asrinah, J. S. S. (2011). *Menstruasi Dan Permasalahannya*. 2011.
- Dan Kebidanan Stikes Mitra RIA Husada, K., Nurhidayati, M., & Ekowati, Erik. (N.D.). HUBUNGAN STATUS GIZI DENGAN SIKLUS MENSTRUASI PADA MAHASISWI KEBIDANAN UNIVERSITAS GUNADARMA DEPOK 2020.
- Dokter Fakultas, P., Tsamara, G., Raharjo, W., & Ardiani Putri, E. (2020). HUBUNGAN GAYA HIDUP DENGAN KEJADIAN DISMENORE PRIMER PADA MAHASISWI PROGRAM STUDI The Relationship Between Lifestyle With The Incident Of Primary Dysmenorrhea In Medical Faculty Female Students Of Tanjungpura University (Vol. 2).
- Dwi Prayuni, E., Imandiri, A., & Adianti, M. (2018). *Journal Of Vocational Health Studies Www.E-Journal.Unair.Ac.Id/Index.Php/JVHS Journal Of Vocational Health Studies*. 02, 86–91.
- Fala, M., Sunarti, E., & Herawati, T. (2020). Sources Of Stress, Coping Strategies, Stress Symptoms, And Marital Satisfaction In Working Wives. *Jurnal Ilmu*
- Hamka, M., Ilmu Kesehatan, F., Syarif Hidayatullah Jakarta, U., Kesehatan, J., Negeri Jember, P., Korespondensi Penulis, I., Farradika, Y., Studi Kesehatan Masyarakat, P., Ilmu -Ilmu Kesehatan, F., & Muhammadiyah Hamka Jakarta, U. (2019). Perilaku Aktivitas Fisik Dan Determinannya Pada Mahasiswa Fakultas Ilmu-Ilmu Kesehatan Universitas Yoli Farradika (1), Yuyun Umniyatun (2), Mochamad Iqbal Nurmansyah (3), Miftahul Jannah (4) (1)(2). In *ARKESMAS* (Vol. 4, Issue 1).
- .Hamka, M., Ilmu Kesehatan, F., Syarif Hidayatullah Jakarta, U., Kesehatan, J., Negeri Jember, P., Korespondensi Penulis, I., Farradika, Y., Studi Kesehatan Masyarakat, P., Ilmu -Ilmu Kesehatan, F., & Muhammadiyah Hamka Jakarta, U. (2019). Perilaku Aktivitas Fisik Dan Determinannya Pada Mahasiswa Fakultas Ilmu-Ilmu Kesehatan Universitas Yoli Farradika (1), Yuyun Umniyatun (2), Mochamad Iqbal Nurmansyah (3), Miftahul Jannah (4) (1)(2). In *ARKESMAS* (Vol. 4, Issue 1).
- Hamka, M., Ilmu Kesehatan, F., Syarif Hidayatullah Jakarta, U., Kesehatan, J., Negeri Jember, P., Korespondensi Penulis, I., Farradika, Y., Studi Kesehatan Masyarakat, P., Ilmu -Ilmu Kesehatan, F., & Muhammadiyah Hamka Jakarta, U. (2019). Perilaku Aktivitas Fisik Dan Determinannya Pada Mahasiswa Fakultas Ilmu-Ilmu Kesehatan Universitas Yoli Farradika (1), Yuyun Umniyatun (2), Mochamad Iqbal Nurmansyah (3), Miftahul Jannah (4) (1)(2). In *ARKESMAS* (Vol. 4, Issue 1).
- Hasanah, M. (N.D.). STRES DAN SOLUSINYA DALAM PERSPEKTIF PSIKOLOGI DAN ISLAM. In *Jurnal Ummul Qura: Vol. XIII (Issue 1)*.
- Hidayati1, L. N., & Harsono2, D. M. (2021). TINJAUAN LITERATUR MENGENAI STRES DALAM ORGANISASI. In *Jurnal Ilmu Manajemen* (Vol. 18).
- I Ketut Swarjana SKM MPH DR.PH. (2021). *Konsep Kecemasan Dan Management Stres*.
- Insani, W. N., St, S., Kes, M., Susan, Y., & Respati, A. K. (N.D.). SELF HYPNOSIS BERPENGARUH DALAM MENURUNKAN TINGKAT NYERI HAID PADA REMAJA PUTRI DI SMKN 2 SUMEDANG (Issue 1).

- Islamy, A. (N.D.). FAKTOR-FAKTOR YANG MEMPENGARUHI SIKLUS MENSTRUASI PADA REMAJA PUTRI TINGKAT III. In *Jurnal Keperawatan Jiwa* (Vol. 7, Issue 1).
- Islamy, A. (N.D.). FAKTOR-FAKTOR YANG MEMPENGARUHI SIKLUS MENSTRUASI PADA REMAJA PUTRI TINGKAT III. In *Jurnal Keperawatan Jiwa* (Vol. 7, Issue 1).
- Islamy, A. (N.D.). FAKTOR-FAKTOR YANG MEMPENGARUHI SIKLUS MENSTRUASI PADA REMAJA PUTRI TINGKAT III. In *Jurnal Keperawatan Jiwa* (Vol. 7, Issue 1).
- Kadek, N., Satya, D., Shita, S., & Purnawati, S. (2016). PREVALENSI GANGGUAN MENSTRUASI DAN FAKTOR-FAKTOR YANG MEMPENGARUHI PADA SISWI PESERTA UJIAN NASIONAL DI SMA NEGERI 1 MELAYA KABUPATEN JEMBRANA. In *JURNAL MEDIKA* (Vol. 5). [Http://Ojs.Unud.Ac.Id/Index.php/Eum](http://Ojs.Unud.Ac.Id/Index.php/Eum)
- Kedokteran, N., & Vol3, K. (N.D.). Hubungan Antara Tingkat Aktivitas Fisik Dan Siklus Menstruasi Pada Remaja Di SMA Warga Kota Surakarta The Correlation Between Physical Activity And The Menstruation Cycle In Adolescents At Warga Senior High School Surakarta.
- Kusumo, M. P. (N.D.). BUKU PEMANTAUAN AKTIVITAS FISIK.
- Masyarakat, J. K., Gustina, E., Nur, S., Fakultas, D., Masyarakat, K., & Dahlan, A. (2015). SUMBER INFORMASI DAN PENGETAHUAN TENTANG MENSTRUAL HYGIENE PADA REMAJA PUTRI. [Http://Journal.Unnes.Ac.Id/Nju/Index.Php/Kemas](http://Journal.Unnes.Ac.Id/Nju/Index.Php/Kemas)
- Menstruasi, A. P. (N.D.). BAB II TINJAUAN TEORI. [Http://Repository.Unimus.Ac.Id](http://Repository.Unimus.Ac.Id)
- Musabiq, S. A., & Karimah, I. (2018). GAMBARAN STRESS DAN DAMPAKNYA PADA MAHASISWA DESCRIPTION OF STRESS AND ITS IMPACT ON STUDENTS. *Insight*, 20(2).
- Perwitasari, D. T., Nurbeti, N., & Armyanti, I. (2016). Faktor-Faktor Yang Mempengaruhi Tingkatan Stres Pada Tenaga Kesehatan Di RS Universitas Tanjungpura Pontianak Tahun 2015. In *Jurnal Cerebellum* (Vol. 2).
- Pratiwi, I. C. E., Rahmadianti, I., Nuha, F. D., & Yuhanna, W. L. (2021). Tingkat Pengetahuan Reproduksi Dan Kondisi Fertilitas Generasi Milenial Di Desa Kerik, Kabupaten Magetan. *JEMS: Jurnal Edukasi Matematika Dan Sains*, 9(2), 245.
- Priyati, D., Aisyah Pringsewu, Stik., & Artikel, R. (2018). Midwifery Journal | Kebidanan PENGETAHUAN TENTANG MENSTRUASI DENGAN UPAYA PENANGANAN DISMINOREA PADA SISWI MTS AL-HIDAYAH TUNGGUL PAWENANG KECAMATAN ADILUWIH KABUPATEN PRINGSEWU INFO ARTIKEL ABSTRAK. 3(1), 48–53.
- Priyoto. (2014). Konsep Manajemen Stres. Mei 2014.
- Rudi Haryano. (2016). Siap Menghadapi Menstruasi Dan Menopause . Maret 2016.
- Soesilowati, R., & Annisa, Y. (2016). PENGARUH USIA MENARCHE TERHADAP TERJADINYA DISMINORE PRIMER PADA SISWI MTS MAARIF NU AL HIDAYAH BANYUMAS. In *MEDISAINS: Jurnal Ilmiah Ilmu-Ilmu Kesehatan* (Vol. 14, Issue 8).
- Sukadiyanto. (2010). Stres Dan Cara Mengurangnya. FIK Universitas Negeri Yogyakarta, 1.
- Sukidjo Notoatmodjo. (2015). Metodologi Penelitian Kesehatan .
- Yang, F.-F., Dengan, B., Stres, T., Mahasiswa, P., Kesehatan, F., Universitas, M., Manado, S. R., Kountul, Y. P. D., Kolibu, F. K., Korompis, G. E. C., Ratulangi, S., & Abstrak, M. (2018). FAKTOR-FAKTOR YANG BERHUBUNGAN DENGAN TINGKAT STRES PADA MAHASISWA FAKULTAS KESEHATAN MASYARAKAT UNIVERSITAS SAM RATULANGI MANADO. In *Jurnal KESMAS* (Vol. 7, Issue 5).
- Yudita, N. A., & Yanis, A. (N.D.). Hubungan Antara Mahasiswa Fakultas

THE RELATIONSHIP BETWEEN PARENTING AND ECONOMIC LEVEL WITH STUNTING INCIDENCE IN TODDLERS AT SITURAJA HEALTH CENTER SUMEDANG REGENCY IN 2022

Gita Arisara¹, Rizal Andrian Restu²
Public Health Science Study Program
Faculty of Health Science Sebelas April University
gita.arisara12@gmail.com

Article Info

Article history:

Received April 27, 2022
Revised Mei 03, 2022
Accepted Mei 09, 2022

Keywords:

Parenting
Economic Level
Stunting Incidence

ABSTRACT (10 PT)

Stunting describes growth failure accumulated since before and after birth caused by insufficient intake of nutrients. The purpose of this study was to determine the relationship between parenting and economic level with the incidence of stunting in toddlers at the Situraja Health Center, Sumedang Regency. research methods used quantitative research with a Cross Sectional approach. The population in this study was all mothers who had stunting toddlers in the situraja health center work area as many as 200 people and the sample of this study was 67. The instrument used by distributing questionnaires to respondents. The data were analyzed using chi square. The results of this study found that there was a relationship between parenting ($p = 0.000$) and the incidence of stunting. There is a relationship between the economic level ($p=0.000$) and the incidence of stunting. It is hoped that health workers will further improve information and knowledge for planning stunting prevention and mitigation programs in toddlers effectively and efficiently as well as preparing and improving facilities and infrastructure so as to reduce the prevalence of stunting.



Copyright © 2022 PHSAJ. All rights reserved.

Corresponding Author:

Gita Arisara,
Public Health Science Study Program,
Faculty of Health Science Sebelas April University,
Jl. Cipadung No.54, Kota Kaler, Sumedang Utara, Sumedang, Jawa Barat 45621, Indonesia.
Email: gita.arisara12@gmail.com

1. INTRODUCTION (10 pt)

Stunting is one of the nutritional problems of toddlers. Stunting describes growth failure that has accumulated before and before birth caused by insufficient intake of nutrients (Milman et al., 2005). This condition is measured by height for age (TB/U) or body length for age (PB/U) with a z-score <-2 Standard Deviation compared to child growth from WHO (Pusdatin Kemkes RI 2018). The incidence of stunting is influenced by many factors, both directly such as low nutritional intake and health status, direct causes such as income and economic factors, trade, urbanization, globalization, food systems, social security, health systems, agricultural development, and women's empowerment (Kementerian PPN/Bappenas, 2018).

The World Health Organization (WHO) estimates that the prevalence of stunted children worldwide is 22% or as much as 149.2 million in 2020. When viewed by region, more than half of children under five who experience stunting in 2020 live in Asia or around 53%. toddler. Of the 135.9 stunting under-fives in Asia, more than 11% of cases occurred in Southeast Asia. Based on data Survei Status Gizi Balita Indonesia (SSGBI) in 2021, the prevalence of stunting in Indonesia is currently decreasing by 1.6% per year from 27.7% in 2019 to 24.4% or 5.33 million children under five in 2021.

According to the Head of Representative Badan Kependudukan Dan Keluarga Berencana Nasional (BKKBN) of West Java Province revealed that the stunting prevalence rate in West Java until 2021 had

decreased significantly in 2018 from 31.5%, West Java's stunting rate is now at 24.5. %. Thus, this figure is still far from the prevalence rate targeted in the 2020-2024 RPJMN, which is 14% and the WHO's maximum tolerance limit is 20% or one-fifth of the total number of growing children under five. Sumedang Regency is an area with poor nutritional status, in 2018, the stunting rate in Sumedang Regency reached 32.4 percent. Then, this number continues to decline with 24% in 2019, 17% in 2020 and 11% in 2021. Based on stunting data from the Situraja Health Center in 2022 there are 200 toddlers who experience stunting including 35 very short toddlers and those who short 165 toddlers.

Based on the results of a preliminary study in May 2022 through interviews with 1 Situraja health center officer, namely to nutritionists, it shows that some residents have the characteristics of making a living as traders and farmers with the average income of the population below the minimum wage in Sumedang Regency (3,241,929/month). In addition, there is still a lack of parenting patterns from parents, especially in behavioral aspects, related to feeding practices for infants and toddlers and hygiene practices resulting in inadequate nutritional intake so that children become stunted or short stature.

2. METHOD

This study uses a quantitative research method using a cross-sectional research design that was conducted in July 2022 in the working area of the Situraja Public Health Center. The independent variables in this study are Parenting Patterns and Economic Level. The dependent variable in this study was the incidence of stunting in the working area of the Situraja Health Center. The population in this study were all mothers who had stunting toddlers in the working area of the Situraja Health Center as many as 200 people. In this study, sampling using the formula according to Slovin, taking into account the time and effort that tends to be in terms of an error tolerance level of 10%, then the number of samples obtained from the total population is 67 people.

The sampling technique used in this study is the technique of Probability Sampling and Accidental Sampling with the sampling method using proportions per village with proportional random sampling technique that meets the inclusion criteria. The instrument in this research is a questionnaire. Test the validity and reliability in this study using a standardized questionnaire. Data were collected through interviews using a questionnaire. Furthermore, the collected data was analyzed by editing, coding, cleaning and tabulation in processing the data. Overall data were analyzed using the SPSS program including univariate analysis and bivariate analysis. The statistical analysis used the chi-square test.

3. RESULTS AND DISCUSSION

3.1. Results

3.1.1 Univariate Analysis

1. Description of Stunting Incidence

Frequency distribution of stunting in toddlers based on the category of stunting can be seen in the table below:

Table 3.1 Frequency Distribution of stunting in toddlers based on the category of stunting

Category of Stunting	Frequency	Percent (%)
Very short	20	29.9
Short	47	70.1
Total	67	100%

Based on table 3.1, it can be concluded that most of the mothers have stunting toddlers in the short category as many as 47 children (70.1%).

2. Description of Parenting patterns

Frequency distribution of respondent based on parenting patterns can be seen in the table below:

Table 3.2 Frequency Distribution of respondent based on parenting patterns

Parenting Patterns	Frequency	Percent (%)
Poor-parenting pattern	20	29.9
Sufficient-parenting pattern	38	56.7
Good-parenting pattern	9	13.4
Total	67	100%

Based on table 3.2, it can be concluded that the majority of mothers who have stunting toddlers have sufficient parenting pattern as many as 38 people (56.7%).

3. Description of economic level

Frequency distribution of respondent based on the economic level can be seen in the table below:

Table 3.3 Frequency distribution of respondent based on the economic level

Economic Level	Frequency	Percent (%)
Low income	35	52.2
High income	32	47.8
Total	67	100%

Based on table 4.2, it can be concluded that the majority of mothers who have stunting toddlers have a low economic level as many as 35 people (52.2%).

3.1.2 Bivariate Analysis

1. Relationship between Parenting Patterns with Stunting Incidence

The analysis results of parenting patterns with stunting can be seen in the table below:

Table 3.4 Relationship between The Parenting Patterns with Stunting Incidence

Parenting Patterns	Stunting				Total	P Value*
	Short		Very Short			
	F	%	F	%		
Poor-parenting pattern	8	11.9%	12	17.9%	20	29.9%
Sufficient-parenting pattern	34	50.7%	4	6.0%	38	56.7%
Good-parenting pattern	5	7.5%	4	6.0%	9	13.4%
Total	47	70.1%	20	29.9%	67	100%

Based on table 4.4 regarding the cross tabulation of the relationship between parenting patterns with stunting incidence in the working area of the Situraja Health Center, Sumedang Regency, it was found that the respondents who had good parenting were 5 people (7.5%) in the short stunting category and 4 people (6.0%) in the very short category. From the group of respondents with adequate parenting, there were 34 people (50.7%) with the short stunting category and 4 people (6.0%) with the very short stunting category. While the group of respondents with poor parenting, there were 8 respondents (11.9%) in the short stunting category and 12 (17.9%) in the very short stunting category.

The results of the Chi-Square test ($p = 0.000$) stated that there was a relationship between parenting patterns with stunting incidence in the working area of the Situraja Public Health Center.

2. Relationship between Economic Level with Stunting Incidence

The analysis results of economic level with stunting can be seen in the table below:

Table 3.4 Relationship between The Parenting Patterns with Stunting Incidence

Economic Level	Stunting				Total	P Value*
	Short		Very Short			
	F	%	F	%		
Low income	18	26.9%	17	25.4%	35	52.2%
High income	29	43.3%	3	4.5%	32	47.8%
Total	47	70.1%	20	29.9%	67	100%

Based on table 4.5 regarding the cross tabulation of the relationship between economic level with stunting incidence in the working area of the Situraja Health Center, Sumedang Regency, it was found that respondents with low economic levels, there were 18 respondents (26.9%) in the short stunting category and 17 (25.4%) in the very short stunting category. From the group of respondents with a high economic level, there were 29 respondents (43.3%) in the short stunting category and 3 (4.5%) in the very short stunting category.

The results of the Chi-Square test ($p = 0.000$) stated that there was relationship between the economic level with stunting incidence in the working area of the Situraja Public Health Center.

3.2 Discussion

1. Relationship between Parenting Patterns with Stunting Incidence

Based on the results of statistical tests obtained a value of 0.000 and it showed that there is a significant relationship between parenting with stunting incidence in toddlers in the working area of the Situraja Health Center, Sumedang Regency.

The results of the study were in line with Adha, A.S, et al in the coastal area of Bonto Ujung Village, Tarawang District, Jeneponto District in 2019, which stated that there was a significant relationship between parenting pattern with stunting incidence (p-value 0.005). Another study by Saraswati, D., et al in Karanganyar Village, Kawalu District, Tasikmalaya City in 2021 also supports the results of his research, which showed that there a significant relationship between parenting patterns and stunting with a p-value of 0.011.

According to Theory (Wiku, 2007) Parenting patterns for toddlers are in the form of attitudes and behaviors of mothers or other caregivers in terms of their proximity to children, providing food, care, maintaining cleanliness, feeling safe and so on. According to Jus'at (2000) parenting is the ability of the family to provide, care and support for children so that they can grow and develop as well as possible physically, mentally and socially.

Researcher assume that the behavior of mothers in caring for their toddlers has a close relationship with the incidence of stunting in toddlers. Mothers with good parenting will tend to have children with good nutritional status and otherwise, mothers with poor nutritional parenting have children with poor nutritional status as well. Sufficient parenting practices are very important not only for children's endurance but also for optimizing children's physical and mental development as well as maintaining children's health conditions. Parenting in this case includes attention or support for mothers that is given from pregnancy to the child care process because it can affect the growth and development of toddlers, breastfeeding and complementary feeding for children as well as food maintenance and storage, and health practices at home including search patterns health services.

Parenting also contributes to the well-being and happiness as well as a good quality of life for the child as a whole. Conversely, if mother provides poor parenting, especially food security and child health, because it can be one of the factors causing children to suffer from stunting. Due to adequate food parenting with good quality, the consumption of food for toddlers will ultimately affect the nutritional status of toddlers.

2. Relationship between Economic Level with Stunting Incidence

Based on the results of the analysis, a p value of 0.000 was obtained and it can be concluded that there is a significant relationship between the economic level with stunting incidence in children under five in the working area of the Situraja Health Center, Sumedang Regency.

The results of this study are in line with Mustikaningrum, A. C. et al, in the city of Semarang in 2016, which showed that there was a significant relationship between the economic level and the incidence of stunting with a p value of 0.001. Another study by Marbun, M. et al at the Parapat Public Health Center, Girsang Sipangan Bolon District, Simalungun Regency in 2019 also supports the results of her research, which shows that there is a significant relationship between the economic level and the incidence of stunting with a p value of 0.000.

According to the theory (Seotjiningsih, 2009) Economic level is related to the ability of the household to meet the needs of a good life. Income is something that is obtained from the results of work or business carried out in the form of income. Income is the amount of income that a person receives in the form of money or goods resulting from work or business (Astuti, 2013 in Farhan, 2017). According to Madanijah (2014), the quantity and quality of food consumed by a family cannot be separated from or related to the level of family income.

The researcher assumes that many households with low family economic levels are caused by uncertain income every month or with an average of < Rp.3.241.929,- per month, where most of the types of work are farmers and traders. The economic level is related to the ability of the household to meet the necessities of life. A high economic level makes it easier to meet the necessities of life, whereas a low economic level has more difficulty in meeting the necessities of life. A low economic level will affect the quality and quantity of food consumed by the family. The low level of the economy and weak purchasing power make it possible to overcome eating habits in certain ways that hinder effective nutrition improvement especially for their children. The food obtained will usually be less varied and in small quantities, especially on ingredients that function for the growth of children, a source of protein, vitamins and minerals, thereby increasing the risk of malnutrition. These limitations will increase the risk of family members experiencing stunting.

4 CONCLUSION

Based on the results of research conducted on the relationship between parenting and economic level with the incidence of stunting in children under five at the Situraja Health Center, Sumedang Regency, it can be concluded as follows:

1. Based on the frequency of the majority of mothers who have stunting toddlers, the most dominant are in the short category as many as 47 children (70.1%).
2. Based on the prevalence distribution of parenting with the highest frequency, which is in the sufficient category, as many as 38 people (56.7%) and
3. Based on the distribution of economic level is more dominant in respondents with low economic level as many as 35 people (52.2%).
4. There is a significant relationship between parenting and the incidence of stunting in toddlers at the Situraja Health Center, Sumedang Regency with p value = 0.000.
5. There is a significant relationship between the economic level and the incidence of stunting in children under five at the Situraja Public Health Center, Sumedang Regency with p value = 0.000.

ACKNOWLEDGEMENTS

In writing this journal, the author has received a lot of guidance and encouragement from various parties. Therefore, on this occasion the author would like to express his deepest gratitude to:

1. Mr. H. Sutisna.,SKM.,M.Si.,MM.Kes is the Dean of the Faculty of Health Sciences, Sebelas April University as well as the 1st Advisory Lecturer who has provided direction to the author.
2. Mrs. Mona Yulianti., S.Kep., Ners.,M.Kep. as the head of nursing science study program as well as advisor 1 who is always willing to patiently take the time and willingness to provide useful guidance, criticism, suggestions and advice in the process of compiling this research.
3. Mrs. GIta Arisara., S.K.M.,M.K.M. as advisor 2 who has provided direction and guidance in writing this research
4. Mr. Wardiman, SKM., as te Head of Situraja Health Center who has given research permission to the author.
5. Nutrition staff of the Situraja Health Center who has helped with this research.
6. Especially thank you to the whole family, parents who have given love, prayers, enthusiasm and sacrifices both morally and materially for the smooth life and future of the author.
7. All respondents who have participated in this study

REFERENCES

- Adha, A. S., Bahtiar, N. W., Ibrahim, I. A., Syarfaini, S., & Nildawati, N. (2021). Analisis Hubungan Pola Asuh Ibu Dengan Kejadian Stunting Pada Balita Di Kabupaten Jenepono. *Al Gizzai: Public Health Nutrition Journal*, 71-82.
- Alfiah, S. N., & Setiyabudi, R. (2020). HUBUNGAN POLA ASUH PEMBERIAN MAKAN DAN STATUS EKONOMI DENGAN KEJADIAN BALITA PENDEK. *Human Care Journal*, 5(3), 742-749.
- Ali, K. (2018). PENGARUH PELAYANAN DAN DAYA TARIK PRODUK TERHADAP KEPUASAN NASABAH KREDIT UMUM BANK EKA BUMI ARTHA KOTA METRO. *FIDUSIA: JURNAL KEUANGAN DAN PERBANKAN*, 1(1).
- Anggraeni, R. (2018). Pengaruh penyuluhan manfaat mobilisasi dini terhadap pelaksanaan mobilisasi dini pada pasien pasca pembedahan laparatomi. *Syntax Literate; Jurnal Ilmiah Indonesia*, 3(2), 107-121.
- Anjani, S., Dantes, N., & Artawan, G. (2019). Pengaruh implementasi gerakan literasi sekolah terhadap minat baca dan kemampuan membaca pemahaman siswa kelas v sd gugus ii kuta utara. *PENDASI: Jurnal Pendidikan Dasar Indonesia*, 3(2), 74-83.
- Arsyati, A. M. (2019). Pengaruh penyuluhan media audiovisual dalam pengetahuan pencegahan stunting pada ibu hamil di Desa Cibatok 2 Cibungbulang. *Promotor*, 2(3), 182-190.
- Astuti, S. (2018). Gerakan Pencegahan Stunting melalui pemberdayaan masyarakat di kecamatan jatinangor kabupaten sumedang. *Dharmakarya*, 7(3), 185-188.
- Aulia, A. R., & Yuliaty, A. L. (2019). Pengaruh city branding “A Land of Harmony” terhadap minat berkunjung dan keputusan berkunjung ke puncak, Kabupaten Bogor. *Jurnal Ilmiah MEA (Manajemen, Ekonomi, & Akuntansi)*, 3(3), 67-75.

- Ayuni, R., & Sati, F. L. (2022). Pengaruh Pengetahuan Kewirausahaan dan Minat Berwirausaha Terhadap Motivasi Untuk Menjadi Young Entrepreneur Pada Mahasiswa Pendidikan Ekonomi Universitas Muhammadiyah Bengkulu. *Jurnal Economic Edu*, 2(2).
- Choliq, I., Nasrullah, D., & Mundakir, M. (2020). Pencegahan stunting di Medokan Semampir Surabaya melalui modifikasi makanan pada anak. *Humanism: Jurnal Pengabdian Masyarakat*, 1(1).
- Dewi, S. K., & Sudaryanto, A. (2020). Validitas dan Reliabilitas Kuisioner Pengetahuan, Sikap dan Perilaku Pencegahan Demam Berdarah. Prosiding Seminar Nasional Keperawatan Universitas Muhammadiyah Surakarta 2020.
- Diah Tantri Suhendrawidi, K. (2018). HUBUNGAN ANTARA PEMBERIAN ASI EKSKLUSIF DENGAN KEJADIAN STUNTING DI WILAYAH KERJA PUSKESMAS BULELENG III.
- Fadliana, A., & Darajat, P. P. (2021). Pemetaan Faktor Risiko Stunting Berbasis Sistem Informasi Geografis Menggunakan Metode Geographically Weighted Regression. *IKRA-ITH INFORMATIKA: Jurnal Komputer dan Informatika*, 5(3), 91-102.
- Fatimah, J., & Nafuri, S. R. (2019). Konfirmasi tiga variabel yang berpengaruh terhadap motivasi ibu hamil melakukan kunjungan antenatal care. *Jurnal Ilmu Keperawatan dan Kebidanan*, 10(2), 389-397.
- Handayani, L. T. (2018). Kajian Etik Penelitian Dalam Bidang Kesehatan Dengan Melibatkan Manusia Sebagai Subyek. *The Indonesian Journal of Health Science*, 10(1).
- Handayani, R., Purbasari, I., & Setiawan, D. (2020). Tipe-Tipe Pola Asuh Dalam Pendidikan Keluarga. *Refleksi Edukatika: Jurnal Ilmiah Kependidikan*, 11(1), 16-23.
- Helmyati, S., Atmaka, D. R., Wisnusanti, S. U., & Wigati, M. (2020). *STUNTING: Permasalahan dan Penanganannya*. UGM PRESS.
- Hendrawan, A. K., & Hendrawan, A. (2020). Gambaran Tingkat Pengetahuan Nelayan tentang Kesehatan dan Keselamatan Kerja. *Saintara: Jurnal Ilmiah Ilmu-Ilmu Maritim*, 5(1), 26-32.
- Hutabarat, Y. P. (2020). PENGARUH PENGAWASAN, PENGEMBANGAN KARIR, DAN PROMOSI JABATAN TERHADAP KINERJA KARYAWAN PADA PT. SAKA MITRA SEJATI MEDAN. *Jurnal Manajemen dan Akuntansi Medan*, 2(3).
- INDRA BUDI ANTARI, L. U. H. (2020). *Hubungan Pola Asuh Orang Tua dengan Kejadian Stunting pada Balita Usia 24-59 Bulan* (Doctoral dissertation, Poltekkes Denpasar).
- Langoday, C. E. P. (2021). PENGARUH CURRENT RATIO (CR), RETURN ON INVESTMENT (ROI), FIXED ASSET RATIO (FAR) TERHADAP DEBT TO EQUITY RATIO (DER) Pada Perusahaan sub Sektor Non Cyclical yang terdaftar di Bursa Efek Indonesia (BEI) tahun 2015-2019. *Jurnal Ilmiah Mahasiswa Akuntansi*, 1(3), 190-198.
- Lensoni, L., Musriandi, R., Rahmiyani, D., Fajri, N., Sarida, S., Nurmila, N., ... & Maysura, F. (2021). PEMBERIAN PENYULUHAN DALAM PENINGKATAN PENGETAHUAN IBU-IBU DI DESA LAGANG KOMPLEK IOM KECAMATAN DARUL IMARAH KABUPATEN ACEH BESAR TERHADAP TINGKAT KEJADIAN STUNTING. *Jurnal DIMASAYA*, 1(1), 29-34.
- Marbun, M., Pakpahan, R., & Tarigan, A. K. (2019). Hubungan Pengetahuan Ibu Hamil Dan Tingkat Ekonomi Tentang Kejadian Stunting Dipuskesmas Parapat Kecamatan Parapat Kabupaten Simalunguntahun 2019. *Jurkessutra: Jurnal Kesehatan Surya Nusantara*, 7(2).
- Mustikaningrum, A. C., Subagio, H. W., & Margawati, A. (2016). Determinan kejadian stunting pada bayi usia 6 bulan di Kota Semarang. *Jurnal Gizi Indonesia (The Indonesian Journal of Nutrition)*, 4(2), 82-88.
- Ningsih, D. M. R. (2020). Pengaruh Metode Kuliah Online Terhadap Tingkat Pemahaman Materi Kuliah Hukum Investasi Pada Mahasiswa Universitas Teknologi Indonesia. *Jurnal Pendidikan*, 21(2), 104-110.
- Oktavia, L. (2020). Stunting pada Remaja Kawasan Buruh Industri dan Nelayan di Kota Surabaya. *Biokultur*, 9(1), 1-19.
- PARDEDE, F. M. W. (2021). SKRIPSI LITERATURE REVIEW: HUBUNGAN POLA ASUH ORANG TUA DENGAN KEJADIAN OBESITAS PADA ANAK USIA SEKOLAH DASAR.
- PATI, BALITA DI WILAYAH PUSKESMAS KABUPATEN. "ANALISIS FAKTOR YANG MEMPENGARUHI KEJADIAN STUNTING PADA."
- Permatasari, T. A. E., & Astin, N. M. (2020). Analisis Dukungan Institusi Terhadap Penyelenggaraan Kantin Sehat Pada Mahasiswa Di Universitas Negeri Dan Swasta Di Jakarta. *IAKMI Jurnal Kesehatan Masyarakat Indonesia*, 1(1), 17-24.
- Pratiwi, Y., & Sugiyanto, K. C. (2019). Hubungan Pengetahuan Pasien Tentang Obat Keras Terhadap Pembelian dan Kepatuhan Pasien Minum Obat Antibiotika Tanpa Resep Dokter di Apotek Kabupaten Kudus. *Cendekia Journal of Pharmacy*, 3(2), 74-84.
- Primasari, Y., & Keliat, B. A. (2020). Parenting Practices as Prevention of Stunting Impact in Children's Psychosocial Development. *Jurnal Ilmu Keperawatan Jiwa*, 3(3), 263-272.
- Pristya, T. Y., Fitri, A. M., & Wahyuningtyas, W. (2021). Literature Review: Gizi Antenatal terhadap Kejadian Stunting. *Jurnal Kesehatan*, 12(2), 314-321.

- Puskesmas Situraja 2022. Profil Puskesmas Situraja Tentang Rekap Balita Berdasarkan Indeks/Tinggi Badan Menurut Umur 0-59 Bulan
- Qomariyah, N. (2020). *Hubungan Pola Asuh Orangtua Dengan Perilaku Kesulitan Makan Pada Anak Prasekolah Di TK Yannas Husada Kota Bangkalan* (Doctoral dissertation, Universitas Muhammadiyah Gersik).
- Rakhmawati, E., Megasari, E., Diyah, A. W., & Eka, S. A. (2021). Hubungan Kepatuhan Penggunaan Obat Antihipertensi Terhadap Kejadian Stroke Dan Kualitas Hidup Penderita Hipertensi Di Kota Kediri, Jawa Timur. *Java Health Journal*, 8(1).
- Rikatsih, N., & Kom, M. (2021). METODOLOGI PENELITIAN ILMU KOMPUTER. *Metodologi Penelitian di Berbagai Bidang*, 1.
- Saputra, R. F., Suyanto, S., & Japlani, A. (2021). PENGARUH LITERASI KEUANGAN TERHADAP MINAT BERINVESTASI DI PASAR MODAL DENGAN PERKEMBANGAN TEKNOLOGI DIGITAL SEBAGAI VARIABEL MODERASI (Studi Empiris Mahasiswa Akuntansi Universitas Muhammadiyah Metro). *Jurnal Akuntansi AKTIVA*, 2(2), 196-203.
- Saraswati, D., Gustaman, R. A., & Hoeriyah, Y. A. (2021). Hubungan Status Ketahanan Pangan Rumah Tangga Dan Pola Asuh Terhadap Kejadian Stunting Pada Baduta: Studi Pada Baduta Usia 6-24 Bulan Di Kelurahan Karanganyar Kecamatan Kawalu Kota Tasikmalaya. *Jurnal Ilmu Kesehatan Bhakti Husada: Health Sciences Journal*, 12(2), 226-237.
- Sommeng, F. (2018). Hubungan Status Fisik Pra Anestesi Umum dengan Waktu Pulih Sadar Pasien Pasca Operasi Mastektomi di RS Ibnu Sina Februari-Maret 2017. *UMI Medical Journal*, 3(1), 47-58.
- Susilowati, L., Trisetiyaningsih, Y., & Nursanti, I. (2021). Pencegahan Stunting Pada Balita Selama Masa Pandemi Covid-19 Melalui Edukasi Audiovisual. *Community Empowerment*, 6(4), 563-567.
- Wahyuni, D., & Fitrayuna, R. (2020). Pengaruh Sosial Ekonomi Dengan Kejadian Stunting Pada Balita Di Desa Kualu Tambang Kampar. *J Kesehatan Masy*, 4(1), 20-6.
- Wati, A. M. R., & Kusumawati, Y. (2022). Analisis Kualitas Pelayanan Darah Terhadap Kepuasan Konsumen di UTD PMI Kab. Kediri. *Jurnal Multidisiplin Madani*, 2(1), 251-266.

ANALYSIS OF WASTE DISPOSAL PROCESS MANAGEMENT IN THE CIBEREUM TPA OF SUMEDANG REGENCY IN 2022: A QUALITATIVE STUDY

Hana Fitria Andayani ¹, Dedeh Widaningsih Ramdani ²

Public Health Science Study Program
Faculty of Health Science, Sebelas April University
hanafitria53@gmail.com

Article Info

Article history:

Received April 06, 2022
Revised Mei 02, 2022
Accepted Mei 09, 2022

Keywords:

Waste Disposal Process
Management
Cibereum TPA Sumedang
Regency

ABSTRACT

Garbage is the residue of human daily activities and natural processes in solid form. This study aims to determine how the management of the waste disposal process at the Cibereum TPA Sumedang Regency in 2022. As much as 17 percent, or about 11.6 million tons, was contributed by plastic waste. The composition of national waste shows a tendency to increase the generation of plastic waste from 11% in 2010 to 17% in 2021 (Ministry of Environment and Forestry, 2021). The method used is a qualitative method. Data collection techniques used interview techniques, documentation and literature study using the Focus Group Discussion (FGD) method with purposive sampling. The Department of Environment and Forestry said that the generation of waste is increasing every day but the target to reduce the volume of waste by 70% (42.35m³) has reached 30% (18.15m³) from 60.5m³ per day. The bureaucratic structure prepared by the Environment and Forestry Service in the field of waste at the Cibereum TPA has not been implemented properly. For this reason, it is expected to advocate for the need for Sumedang Regency government policies for waste management.



Copyright © 2022PHSAJ. All rights reserved.

Corresponding Author:

Hana Fitria Andayani
Public Health Science Study Program,
Faculty of Health Science, Sebelas April University,
Jl. Cipadung No.54, Kotakaler, Sumedang Utara, Sumedang, Jawa Barat 45621, Indonesia.
Email: hanafitria53@gmail.com

1. INTRODUCTION

1.1 Data Analysis

Garbage is a solid object that is formed as a result of a person's daily physical activities. This old paradigm causes very heavy pressure on TPA, because it requires a long period of time for waste to be decomposed by natural processes. Moreover, from about 500 TPAs in Indonesia, almost all of them still use the open-dumping system, namely waste disposal by dumping it in open fields without any treatment (BPPT, 2016). Indonesia is a country that can be said to be the largest source of waste in the world. This is a very serious problem, both economically and socially.

The Government of Indonesia has various programs aimed at reducing the amount of waste in each region of Indonesia, which are included in the Law of the Republic of Indonesia No. 18 of 2008 regarding the amount of waste that is managed as contained in paragraph 2. Consists of household waste, namely household waste from daily activities in the household, except for sewage and special waste. The types of residual household waste originating from trade fields, industrial fields, special fields, social facilities, public

facilities and other facilities. Depending on the form, there are three types of waste or waste, namely liquid waste, solid waste and gas waste.

According to the records of the Head of the Environment Agency of West Java province, he said that the increase in population, changes in people's consumption patterns, and the COVID-19 pandemic caused the generation of waste in the West Java region to increase, this was due to the use of single-use masks. In 2020, the population of West Java will reach 49.9 million people with waste generation reaching 24,790 million tons per day. The total national waste in 2021 will reach 68.5 million tons. Of that amount, as much as 17%, or about 11.6 million tons, was contributed by plastic waste. In 2021, it is estimated that Indonesia's waste will amount to 68.5 million tons. The interesting thing is that the composition of national waste shows that there are the tendency to increase the generation of plastic waste from 11% in 2010 to 17% in 2021 (Ministry of Environment and Forestry (KLHK, 2021).

1.2 Preliminary Studies

One of the conditions faced by the Department of Environment and Forestry in an effort to suppress the volume of waste in the Sumedang Regency Final Disposal Site (TPAS) still has weaknesses in efforts to control the volume of waste every day. This is shown by the weak standard of controlling the volume of waste with land conditions that have exceeded capacity, causing the accumulation of waste.

Garbage generation in 2022 per sub-district, Sumedang Regency, which contributes the most waste is in the Jatinangor area with a population of 91,391 people with 228.5m³ of waste generation. TPAS area of 10 hectares is already on the verge of capacity or overload. This is caused by the lack of government budget in supporting facilities and infrastructure for waste management at the Cibereum TPA, Sumedang Regency in 2022.

2. METHOD

The type of research used in this research is qualitative. Qualitative research aims to accurately describe the characteristics of individuals, circumstances, symptoms or certain groups to determine the existence of a symptom with other symptoms in society. This study uses a qualitative method with a phenomenological approach. The use of this method is based on the reason that the focus in this research is the management of the waste management process at the Cibereum TPA, Sumedang Regency. Meanwhile, the phenomenological approach is to find out the description of the steps in the waste management process at the Cibereum TPA, Sumedang Regency.

The subject of this study using 5 key informants, core and supporting. including 1 DLHK, 2 TPA Cibereum and 2 janitors for TPA Cibereum Sumedang Regency. The sampling technique used is purposive sampling with data sources from primary and secondary data with data collection methods through interviews, documentation, literature studies with data analysis using library research analysis techniques, the Foccus Group Discussion method.

3. RESULTS AND DISCUSSION

3.1. Results

From the results of the interview, The disposal and management of solid waste in Sumedang Regency is handled by the PSP Sub-Sector at the Sumedang Regency Environment and Forestry Service. The generation of waste that enters the Cibereum TPA every day - + 60.5 m³ with a land area of 10 hectares still uses an open dumping system.

The waste generation has been said to have reached an overload capacity, this happens because the waste generation continues to increase but the management system used is not right so that in processing this waste, it is still using the previous version of the system, namely open dumping. According to the results of the interview, the cause of the occurrence of waste generation that is on the verge of overload is government funds which are difficult to get out of to facilitate facilities and infrastructure in supporting waste processing such as machines or tools for the soil filling process so that waste is allowed to accumulate after processing.

But on the other hand, DLHK and Cibereum TPA have a target to reduce the volume of waste by 70% from 60.5 m³ or 42.35 m³ which has now started to decrease by 30% or 18.15 m³.

3.2. Discussion

The Discussion about the management of the planning system in the waste disposal process that the researchers saw in the field, it was in accordance with Law 18 of 2008 concerning waste management. The organizational management system in the waste disposal process, it has referred to the planning, but the organization has not yet gone according to plan. This is because there are several facilities and infrastructure

that are not yet available, for example, in the process of organizing the compaction of the landfill, there are no tools for leveling or compacting waste with earthfill.

The management of the implementation system at TPA Cibereum, it has been going well until the case with planning and then organizing until the implementation is good, but there are some researchers who are not appropriate, such as references issued by the government or related agencies have recommended that management must use the renvil control system. but at the time of its implementation it still uses an open dumping system this is because there is no budget or policy to support it. And In the management of this supervisory process, it is in accordance with the policy, which is once every 3 days according to the schedule for each waste generation that comes.

The Discussion it can be concluded that the process of waste disposal to waste management at the Cibereum TPA is mostly in accordance with the procedure although it still uses the open dumping method. but there are still some things that need to be improved on waste management including budget arrangements for the continuity of the waste disposal process at the Cibereum TPA.

The author provides suggestions and discussions on the discussion during the interview about budget management for each waste transportation or people who dispose of waste to the TPA directly are subject to cash of 30,000 rupiah to be used as supporting needs at the Cibereum TPA, Sumedang Regency.

4. CONCLUSION

The Conclusion on the results of research on Waste Disposal Process Management at TPA Cibereum, Sumedang Regency in 2022, it can be concluded as follows:

1. Waste disposal and management in Sumedang Regency is handled by the PSP Sub Division at the Sumedang Regency Environment and Forestry Service.
2. The management used in this study uses the theory of George R. Terry, namely POAC (Planning, Organizing, Actuating, Controlling). For the management of the waste disposal process at the Cibereum TPA in general, it is in accordance with the procedures on good management which refer to George R. Terry's theory and book references by the authors Damanhuri and Tri Padmi, 2019.
3. Operational Techniques in the waste disposal process at the Cibereum TPA refers to the regulations in force in Indonesia in the book of Integrated Waste Management Second Edition of 2019 which states that operational techniques in waste management consist of Storage, Collection, Transfer, Transport, Processing, Removal/Dredging . In the process of disposing of waste at the Cibereum TPA, most of them are in accordance with standards ranging from collection or collection to waste removal, but there are some that are not in accordance with procedures such as the lack of supporting transportation equipment and then funds from the government are difficult to get, making it difficult for officers to manage disposal.

REFERENCES

- Agung, K., Juita, E., &Zuriyani, E. (2021). Analisis Pengelolaan Sampah Di Tempat Pembuangan Akhir (Tpa) Desa Sido Makmur Kecamatan Sipora Utara. *Jpig (Jurnal Pendidikan Dan Ilmu Geografi)*, 6(2), 115-124.
- Akbar, B. (2018). Studi Karakteristik Timbulan Sampah Dan Analisis Pengetahuan Pengelolaan Sampah Penghuni Rumah Hunian (Indekost) (Studi Kasus: Jenis Eksklusif Dan Non Eksklusif Di Sekitar Kampus TerpaduUii).
- Alma, L. R., Ulfah, N. H., Utomo, Y., Afifah, A., Adawiyah, U., Kholifah, W. D. N., &Merillarosa, I. (2019). Analisis Risiko Bahaya Pada Pekerja Di Tempat Penampungan Sampah Terpadu Reduce Reuse Recycle (Tpst 3r) Mulyoagung Bersatu Dau Kabupaten Malang. *Preventia: The Indonesian Journal Of Public Health*, 4(2), 110-115.
- Arisona, R. D. (2018). Pengelolaan Sampah 3r (Reduce, Reuse, Recycle) Pada Pembelajaran Ips Untuk Menumbuhkan Karakter Peduli Lingkungan. *Al Ulya: Jurnal Pendidikan Islam*, 3(1), 39-51.
- Dwisupriyanto, N. I. M. (2018). *Implementasi Manajemen Pengawasan Di Bank sampah "Sampah Sahabatku"(Bs3) Muntang, Kemangkong, Purbalingga* (Doctoral Dissertation, Iain Purwokerto).
- Gunawan, I. (2013). Metode Penelitian Kualitatif. *Jakarta: BumiAksara*, 143, 32-49.
- Halilurrahman, H. (2020). *Sistem Pengelolaan Sampah Pasar Pagesangan Kota Mataram* (Doctoral Dissertation, Universitas Muhammadiyah Mataram).
- Kristian, A. A. S. (2021). *Analisis Pengelolaan Sampah Di Tempat Pembuangan Akhir (Tpa) DesaSido Makmur KecamatanSipora Utara* (Doctoral Dissertation, StkipPrgi Sumatera Barat).

- Kurniati, E., Mirawati, M., Rudiyanto, R., Fitriani, A. D., Rengganis, I., & Justicia, R. (2019). Implementasi Program Anak Peduli Lingkungan Melalui Kegiatan Memilah Sampah. *Early Childhood: Jurnal Pendidikan*, 3(1), 1-6.
- Kusumawardani, N., Soerachman, R., Laksono, A. D., Indrawati, L., Hidayangsih, P. S., & Paramita, A. (2015). Penelitian Kualitatif Di Bidang Kesehatan. *Yogyakarta: Pt Kanisius*.
- Mubarakh, F. A., Yulianti, R., & Yusuf, M. (2021). Implementasi Strategi Dinas Lingkungan Hidup Dalam Menangani Sampah Di Kota Serang. *Jurnal Administrasi Publik*, 12(2).
- Mulasari, S. A. (2013). Hubungan Tingkat Pengetahuan Dan Sikap Terhadap Perilaku Masyarakat Dalam Mengolah Sampah Di Dusun Padukuhan Desa Sidokarto Kecamatan Godean Kabupaten Sleman Yogyakarta. *Kes Mas: Jurnal Fakultas Kesehatan Masyarakat Universitas Ahmad Daulan*, 6(3), 24880.
- Nasution, N. H. (2017). Analisis Sistem Pengelolaan Sampah Di TPATerjun Kecamatan Medan Marelan Kota Medan Tahun 2017.
- Nurdiansah, T., Purnomo, E. P., & Kasiwi, A. (2020). Implementasi Pembangkit Listrik Tenaga Sampah (Pltsa) Sebagai Solusi Permasalahan Sampah Perkotaan; Studi Kasus Di Kota Surabaya. *Envirotek: Jurnal Ilmiah Teknik Lingkungan*, 12(1), 87-92.
- Sari, D. (2016). Peran Dinas Kebersihan Dalam Pengelolaan Sampah RumahTangga Di Tpa Terjun Kecamatan Medan Marelan.
- Tarigan, T. (2019). Sistem Pengelolaan Sampah Rumah Tangga Di Desa manuk Mulia Kecamatan Tiga panah Kabupaten Karo Tahun 2019.
- Widiarti, I. W. (2012). Pengelolaan Sampah Berbasis Zero Waste Skala Rumah Tangga Secara Mandiri. *Jurnal Sains&Teknologi Lingkungan*, 4(2), 101-113.
- Damanhuri, E., & Padmi, T., (2019) Pengelolaan Sampah Terpadu Edisi Kedua. *Bandung*. Perpustakaan ITB.
- Marttha, E., & Kresno, S. (2016). Metodologi Penelitian Kualitatif Untuk Bidang Kesehatan. *Jakarta*. PT Raja grafindo Persada.
- Perbup 12 Th 2019 Tentang Kebijakan Dan Strategi Daerah Kabupaten Sumedang Dalam Pengelolaan Sampah RumahTangga Dan Jenis Sampah Rumah Tangga

FACTORS RELATED TO EARLY MARRIAGE IN YOUNG WOMEN INCIMALAKA DISTRICT SUMEDANG 2022

Hilman Taufik S¹, Siti Nuryani²
Public Health Science Study Program
Faculty of Health Science Sebelas April University
hilmantaufik@unsap.ac.id

Article Info

Article history:

Received April 12, 2022
Revised Mei 20, 2022
Accepted Mei 26, 2022

Keywords:

Parental confidence
Early marriage
Education
Parents income

ABSTRACT

Early marriage is a marriage that is carried out because the bride and groom are not old when they want to carry it out. In accordance with Law Number 16 of 2019, amendments to Law Number 1 of 1974 concerning marriage in Article 7 paragraph 1 stated that marriage is only allowed if the man and woman have reached the age of 19 (nineteen) years. The purpose of this study was to analyze factors related to early marriage in young women in Cimalaka District, Sumedang Regency. The method used in this study was quantitative research using a case control design. The results of the study obtained that there is a relationship between knowledge and early marriage (p-value 0.000, OR value 0.280) parental income level (p-value 0.000) OR 0.17 cultural parents (p-value 0.000) OR 0.07 there is the relationship between parental income and early marriage, there is a cultural relationship between parents and early marriage. Researchers provide advice for KUA officers to provide information to new couples regarding the impact of early marriage, in addition to that for health officers to be able to inform about the impact of early marriage on health.



Copyright © 2022 PHSAJ. All rights reserved.

Corresponding Author:

Siti Nuryani,
Public Health Science Study Program,
Faculty of Health Science Sebelas April University,
Jl. Cipadung No.54, Kota Kaler, Sumedang Utara, Sumedang, Jawa Barat 45621.
Email: hilmantaufik@unsap.ac.id

1. INTRODUCTION

Early marriage is a marriage that is carried out because the bride and groom are not old when they want to carry it out. In accordance with Law Number 16 of 2019, amendments to Law Number 1 of 1974 concerning marriage in Article 7 paragraph 1 stated that marriage is only allowed if the man and woman have reached the age of 19 (nineteen) years. Based on data from the Central Statistics Agency (BPS) in 2020, the number of early marriages or child marriages in 2019 was 10.82 percent and in 2020 it decreased although not significantly, namely 10.18 percent. Child marriage occurs more in rural areas than urban areas. In 2020, 15.24 percent of child marriages occurred in rural areas and 6.82 percent in urban areas.

Marriage at an early age is a serious problem because it can have an impact from various aspects such as the impact on health, the impact on psychology, and the impact on socioeconomics. The impact of this marriage takes place without the mental readiness of the couple which ends in divorce, domestic violence (domestic violence), reproductive health that is not ready so that it can cause pain, continuous sex trauma, miscarriage bleeding and even maternal death during childbirth (Intan Arimurti, 2017).

According to Sezgin, the health impacts that arise include miscarriage (abortus), premature delivery, low baby weight, congenital abnormalities, easy infections, anemia in pregnancy, pregnancy poisoning, child nutritional status, mental health, cardiovascular problems and can cause infant death. According to data from the Office of Religious Affairs of Cimalaka District, Sumedang Regency, there were 450 couples who married during January-December 2021. Among these marriages, it is known that 42 young women who performed early marriages under 19 years old.

2. METHOD

The research design used in this study is quantitative research with a case control study design. In case control studies, risk factors were studied using a retrospective approach, in other words the effects (disease or health status) were identified at the present time, then risk factors were identified as existing or occurring in the past (Notoatmodjo, 2012). This research was conducted in Cimalaka District, Sumedang Regency in 2022. This research was conducted from June to July 2022. Free variables or independent variables in this study are Knowledge, Parental Income, Community Culture, and dependent variables that will be studied, namely Early Marriage in Young Women. The population of cases in this study is young women aged 19 years and under who have married in Cimalaka District, Sumedang Regency, a total of 42 cases in January-December 2021. The control population in this study was Young Women who married over the age of 19 years, a total of 408 adolescents from January to December 2021. From the results of the sample calculation, a minimum number of samples of cases were obtained, which must be taken as many as 36 people, with a large comparison of samples between cases: control = 1: 1 where the sample consisted of 36 respondents as a case group and 36 respondents as a control group. So the total sample as a whole is 72 samples.

The sampling technique or sampling method that will be carried out in this study is by using the Simple Random Sampling method. The instrument in this research is a questionnaire. Test the validity and reliability in this study using a standardized questionnaire. The sampling technique or sampling method that will be carried out in this study is by using the Simple Random Sampling method. The instrument in this research is a questionnaire. Test the validity and reliability in this study using a standardized questionnaire. The data collection techniques carried out in this study are: Primary data obtained through data collection techniques using questionnaires. Secondary data obtained from the Office of Religious Affairs and the Office of Cimalaka Subdistrict, Sumedang Regency. Furthermore, the collected data was analyzed by editing, coding, cleaning and tabulation in processing the data. Overall data were analyzed using the SPSS program including univariate analysis and bivariate analysis. The statistical analysis used the chi-square test.

3. RESULTS AND DISCUSSION

3.1. Results Knowledge

Knowledge is the result of knowing after a person has sensed a certain object. According to the WHO report the lack of sexual knowledge and family planning causes adolescents to be at risk of pregnancy in adolescence (Delita, 2017). The measurement of respondents' knowledge in this study was categorized with good and low knowledge. The distribution of respondents' knowledge based on good and low knowledge categories can be seen in the table below:

Table 1 Frequency Distribution Based on Respondents' Knowledge Level

Categories Knowledge	Frequency	Percent (%)
Good	33	45,8
Low	39	54,2
Total	72	100%

Based on table 1 it was obtained that most respondents had low knowledge of 39 respondents (54.2%).

The income measurements of respondents' parents in this study were categorized as incomes below the District Minimum Wage and above the District Minimum Wage. West Java Governor Regulation No. 561/Kep.732-Kesra/2021 concerning the Minimum Wage for Regencies in Sumedang Regency in 2021 is IDR 3,241,929. The distribution of respondents' income by category below the District Minimum Wage and above the District Minimum Wage can be seen in the table below:

Table 2 Frequency Distribution Based on Respondent Parents' Income

Categories Knowledge	Frequency	Percent (%)
Below the District Minimum Wage	25	34,7
Above the District Minimum Wage	47	65,3
Total	72	100%

Based on table 2 it is obtained that most of the income of the respondents' parents is above the District Minimum Wage of 47 respondents (65.3). In the local culture, it is believed that if the daughter does not get married immediately, it is considered a common thing in the family because it is considered unsold in their environment etc. Cultural measurements of respondents' parents in this study were categorized as believing and distrustful. The cultural distribution of respondents' parents by categories of trust and distrust can be seen in the table below:

Table 3 Frequency Distribution Based on The Culture of Respondents' Parents

Cultural Categories of Parents	Frequency	Percent (%)
Believe	40	55,6
Don't Believe it	32	44,4
Total	72	100%

Based on table 3 it was obtained that most of the cultural parents of respondents believed in early marriage as many as 40 respondents (55.6%). Early marriage is a marriage that is carried out because the bride and groom are less old when they want to carry it out In accordance with Law Number 16 of 2019, the amendment to Law Number 1 of 1974 concerning marriage in Article 7 paragraph 1 states that marriage is only allowed if the man and woman have reached the age of 19 (nineteen) years. Measurements of early marriage in this study were categorized as early marriage and not early marriage. The distribution of early marriages by categories of early marriage and non-early marriage can be seen in the table below

Table 4 Frequency Distribution of Early Marriage in Cimalaka District, Sumedang Regency in 2022

Categories Early Marriage	Frequency	Percent (%)
Early Marriage	36	50,0
Not Getting Early Marriage	36	50.0
Total	72	100%

Based on table 4 it was obtained that respondents who married early 36 respondents (50.0%).

Table 5 Cross-Tabulation of Knowledge with Early Marriage

Knowledge	Case		Control		P-value	OR	95% CI
	N	%	N	%			
Low	32	88,9%	1	2,8%	0,000	28.000	0,029-0,264
Good	4	11,1%	35	97,2%			
Total	36	100,0%	36	100,0%			

Based on table 5, it is known that the percentage of respondents' knowledge is still low in the case group of thirty-two people (88.9%), greater than the control group of only one person (2.8%). Meanwhile, the percentage of knowledge that was already good in the case group was four people

(11.1%), smaller than the control group of thirty-five people (97.2%). Based on the results of Chi-Square that have been carried out, a correction (continuity correction) with (p-value of 0.000) < 0.05 which means that there is a relationship between respondents' knowledge of early marriage in Cimalaka District, Sumedang Regency with an OR value of 28,000 has a 28 times greater risk of early marriage events in adolescents compared to respondents' good knowledge (95% CI = 0.029-0.264).

Tabel 6 Cross-Tabulation of Parental Income with Early Marriage

Parental Income	Case		Control		P-value	OR	95% CI
	N	%	N	%			
Below the District Minimum Wage	22	61,1%	3	8,3%	0,000	17,286	0,444-0,167
Above the District Minimum Wage	14	38,9%	33	91,7%			
Total	36	100,0%	36	100,0%			

Based on table 6, it is known that the percentage of parental income is still below the District Minimum Wage in the case group of twenty-two people (61.1%), greater than the control group of only three people (27.8%). Meanwhile, the percentage of parents' income that was above the District Minimum Wage in the case group was 14 people (38.9%), greater than the control group of 33 people (91.7%). Based on the results of Chi-Square that have been carried out, a continuity correction with (p-value of 0.000) < 0.05 which means that there is a relationship between parental income and early marriage in Cimalaka District, Sumedang Regency with an OR value of 17.286 has a risk of 17.28 times greater risk of the incidence of early marriage in adolescents compared to the income of parents who are already above the District Minimum Wage (95% CI = 0.444-0.672).

Tabel 7 Cultural Cross-Tabulation of Parents with Early Marriage

Parents' Cultural	Case		Control		P-value	OR	95% CI
	N	%	N	%			
Can't believe it	8	22,2%	24	66,7%	0,000	7,000	0,245-0,199
Believe	28	77,8%	12	33,3%			
Total	36	100,0%	36	100,0%			

Based on table 7, it is known that the cultural percentage of parents with a degree of distrust in the case group was eight people (22.%), smaller than the control group of twenty-four people (66.7%). Meanwhile, the percentage of parental trust in the case group was twenty-eight people (77.8%), greater than the control group of twelve people (33.3%).

3.2. Discussion

Based on the results of research from seventy-two respondents, it is known that the percentage of respondents' knowledge is still low in the case group of thirty-two people (88.9%), greater than the control group of only one person (2.8%). Meanwhile, the percentage of knowledge that was already good in the case group was four people (11.1%), smaller than the control group of thirty-five people (97.2%). The results of the Chi Square test analysis can be known to be a value (p-value of 0.000) < 0.05 then H1 is accepted H0 is rejected, then the result is that there is a relationship between respondents' knowledge and early marriage in young women in Cimalaka District, Sumedang Regency. With an OR value of 28,000 and CI (95%) = 0.029-0.264 (the factors studied are risk-protective factors), meaning that adolescents who have low knowledge are protective factors at risk of 0.28 times for early marriage compared to adolescents who have good restraint. This is in accordance with research conducted by Nazli Pohan (2017) which states that there is a relationship between knowledge and early marriage in young women with a value of p = 0.0005 which means it is smaller than $\alpha = 0.05$ and an Odd Ratio (OR) value of 6.19 which means that young women with less knowledge have a risk of 6.19 times marrying early than well-informed young women, this is also in line with research conducted by Nurhikmah (2021) there is a meaningful relationship between respondents' knowledge and early marriage. OR value= 6,417, then adolescents with less knowledge are at risk of 6,417 times performing early marriage compared to well-informed adolescents. Based on the results of a study from seventy-two respondents, the percentage of parental income is still below msc in the case group of twenty-two people (61.1%), greater than the control group of only three people (27.8%) while the percentage of parental income that is above District Minimum Wage in the case group is fourteen people (38.9%), greater than the control group of thirty-three people (91.7%). The results of the Chi Square test analysis can be found out the value (p-value 0.000) < 0.05 then H1 received H0 rejected, then the result is that there is a relationship between parental

income and early marriage in young women in Cimalaka District, Sumedang Regency. With $OR = 17.286$ and $CI (95\%) = 0.444 - 0.67257$ the factors studied are risk factors), meaning that parents who have incomes below the District Minimum Wage have a risk of 17.2 times the case group of about 4-7 times to have an early marriage compared to parents who have incomes above the District Minimum Wage. According to Erni Riyan Research (2020) obtained a calculated R value = 0.311 and a P value = 0.001 so that the parental income factor on early marriage shows that there is a significant and positive pattern, meaning that the lower the parent's income, the more risky the early marriage.

Based on the results of a study from seventy-two respondents, the percentage of parental trust with a level of distrust in the case group of eight people (22%), smaller than the control group of twenty-four people (66.7%). Meanwhile, the percentage of parental trust in the case group was twenty-eight people (77.8%), greater than the control group of twelve people (33.3%). The results of the Chi-Square test analysis can be known to be a value (p -value of $0.00 < 0.05$ then H_1 is rejected H_0 is accepted, then the result is that there is a relationship between parental trust and early marriage in young women in Cimalaka District, Sumedang Regency. With $OR = 7,000$ and $CI (95\%) = 0.485 - 3.337$ values studied are risk factors), meaning that parents who have believed are at risk seven times about performing an early marriage compared to parents who do not believe. According to Nazli Halawani Research (2017) based on the results of the Chi Square test, it was seen that there is a relationship between parental culture and early marriage in young women with a value of $p = 0.001$ which means it is smaller than $\alpha = 0.05$, as well as an Odd Ratio (OR) value of 3.93 which means that parents of young women who believe in culture have a risk of 3.93 times getting married early than parents of young women who do not believe in culture.

4. CONCLUSION (10 pt)

Based on the results of the research and discussion that has been explained in the previous chapter, the results can be concluded as follows:

1. based on the results of the study, it is known that most of the respondents had low knowledge of 39 people (54.2%), while good knowledge was 33 people (45.8%);
2. based on the results of the study, the income of parents below District Minimum Wage was 25 people (34.7%), while the income of parents above District Minimum Wage was 47 people (65.3%);
3. based on the results of research on elementary school education, junior high schools as many as 25 people (34.7%) while high school education, vocational high schools, universities as many as 47 people (65.3%);
4. based on the results of the study, respondents did not believe in early marriage, namely 32 people (44.4%), while respondents believed in early marriage, namely 40 people (55.6%);
5. there is a relationship between respondents' knowledge and early marriage in Cimalaka District, Sumedang Regency. With a value of p -value = $(0.000) < \alpha (0.05)$ $OR = 280,000$ and $CI (95\%) = 0.029 - 0.264$;
6. there is a relationship between parental income and early marriage in young women in Cimalaka District, Sumedang Regency, with p -values = $(0.000) < \alpha (0.05)$, $OR = 17,000$ and $CI (95\%) = 0.444 - 0.167$;
7. there is a cultural relationship between the culture of early marriage parents in young women in Cimalaka District, Sumedang Regency, with p -values = $(0.000) < \alpha (0.05)$, $OR = 7,000$ and $CI (95\%) = 0.245 - 199$.

REFERENCES

- Afriani, R. (2016). Analisis Dampak Pernikahan Dini pada Remaja Putri di Desa Sidoluhur Kecamatan Godean Yogyakarta. In *Prosiding Seminar Nasional & Internasional* (Vol. 1, No. 1).
- Achmad, M. (2005). *Psikologi Keluarga, dari keluarga Sakinah hingga Keluarga Bangsa*. Jakarta: PT. Bina Rena Pariwara
- Amirullah. (2015). *Populasi dan Sampel (pemahaman, jenis dan teknik) disarikan dari buku; Metode Penelitian Manajemen*
- Anwar, C., & Ernawati, E. (2017). Faktor-Faktor yang Mempengaruhi Remaja Putri Melakukan Pernikahan Dini di Kemukiman Lambaro Angan Kabupaten Aceh Besar tahun 2017. *Journal of Healthcare Technology and Medicine*, 3(2), 140-153..
- Ardayani, T. (2020). Faktor-faktor yang Berhubungan dengan Pernikahan Usia Dini. *JURNAL ILKES (Jurnal Ilmu Kesehatan)*, 11(2), 316-324

- Bkkbn, (2012). Kajian Pernikahan Dini pada Beberapa Provinsi di Indonesia : Dampak Overpopulation, Akar Masalah dan Peran Kelembagaan di Daerah. Tersedia di <http://www.bkkbn.go.id/pernikahandin> ippt.Diakses pada tanggal 5 Mei 2022.
- Budiarto, 2007. Statistik Pengolahan Data. Bandung: Alfabeta
- Diniyati, L. S., & Jayatmi, I. (2017). Pengaruh Empat Variabel terhadap Perilaku Pernikahan Dini Perempuan Pesisir. *Jurnal Ilmiah Kesehatan*, 16(02), 14-29.
- Emilia, Raffidah. Ovi., & Wahyuni, B. (2007). Faktor-faktor yang berhubungan dengan Pernikahan Usia Dini di Kabupaten Purworejo Jawa Tengah. *Berita Kedokteran Masyarakat*, 25(2), 51.
- Fadlyana, E., & Larasaty, S. (2016). Pernikahan Usia Dini dan Permasalahannya. *Sari Pediatri*, 11(2), 136- 41.
- Ginting, F & Wantania, J, 2011. Pengetahuan Sikap dan Perilaku Remaja yang Hamil tentang Kehamilan Remaja di Mando, Artikel Ilmiah, Bagian Obstetri dan Ginologi, Fakultas Kedokteran Universitas SamRatualangi, RSUP Prof, Dr, R.D Kandau Manado
- Halawani, P. N. (2017). Faktor yang Berhubungan dengan Pernikahan Usia Dini terhadap Remaja Putri. *Jurnal Endurance*, 2(3), 424-435
- Hurlock, B., Elizabeth, 2013, Psikologi Perkembangan, Edisi 5, Erlangga
- II, B. Gambaran Pengetahuan dan Sikap Kader dalam Kegiatan Posyandu Kelurahan Urug Kecamatan Kawalu Kota Tasikmalaya BAB III.
- Intan Arimurti, 2017. Analisis Pengetahuan Perempuan terhadap Perilaku Melakukan Pernikahan Usia Dini di Kecamatan Wonosari Kabupaten Bondowoso. Universitas Airlangga
- Julianti, N. (2019). Faktor-faktor yang Berhubungan dengan Kejadian Pernikahan Dini pada Remaja Putri di Dusun III Desa Karang Baru Kab. Bekasi Tahun 2018. *Jurnal Ilmiah Kesehatan Medika drg. Suherman*, 1.
- Kumalasari & Andhyantoro, 2012. Kesehatan Reproduksi Mahasiswa Kebidanan & Keperawatan, edisi 1, Salemba Medika, Jakarta.
- Kusnadi, Edi. 2017. Peranan Tokoh Masyarakat dalam Membangun Partisipasi Kewarganegaraan Pemuda Karang Taruna. Skripsi. Yogyakarta : Universitas Ahmad Dahlan Yogyakarta.
- Kusumastuti, F. A. D. (2010). Hubungan antara Pengetahuan dengan Sikap Seksual Pranikah Remaja. Lolang, E. (2014). Hipotesis Nol dan Hipotesis Alternatif. *Jurnal Keguruan dan Ilmu Pendidikan*, 3(3), 685-695.
- Maliana, A. (2017). Hubungan antara Tingkat Pendidikan Perempuan dengan Kejadian Pernikahan Usia Dini di KUA Wilayah Kerja Kecamatan Purbolinggo. *Jurnal Kesehatan*, 1(1).
- Mansur, Herawati. 2009. Psikologi Ibu dan Anak untuk Kebidanan. Jakarta: Salemba Medika
- Mardiah, A., & Asnawi Abdullah, H. (2015). Pendidikan Kesehatan dalam Peningkatan Pengetahuan, Sikap dan Keterampilan Keluarga dengan Hipertensi-Pilot Study. *Jurnal Ilmu Keperawatan*, 3(2).
- Mubarak, W. I., Chayatin, N., & Mainur, I. Pengantar & Teori Ilmu Sosial Budaya Dasar Kebidanan. EGC. Mubasyroh, M. (2016). Analisis Faktor Penyebab Pernikahan Dini dan Dampaknya bagi Pelakunya. *YUDISIA: Jurnal Pemikiran Hukum dan Hukum Islam*, 7(2), 385-411
- Nida, A. K., Noor, M. S., & Heriyani, F. (2020). Hubungan Tingkat Pengetahuan dan Sikap Orang Tua dengan Kejadian Pernikahan Dini di Kecamatan Aluh-Aluh Tahun 2019. *Homeostasis*, 3(1), 1-6.
- Nikmah, J. (2021). Pernikahan Dini Akibat Hamil di Luar Nikah pada Masa Pandemi: Studi Kasus Di Desa Ngunut. *Sakina: Journal of Family Studies*, 5(3).
- Notoatmodjo, Soekijo. 2011. Kesehatan Masyarakat Ilmu dan Seni. Jakarta : PT Rineka Cipta
- Pohan, N. H. (2017). Faktor-Faktor yang Berhubungan Dengan Pernikahan Usia Dini terhadap Remaja Putri. *Jurnal Endurance: Kajian Ilmiah Problema Kesehatan*, 2(3), 424-435.
- Nurhikmah, N., Carolin, B. T., & Lubis, R. (2021). Faktor-Faktor Yang Berhubungan Dengan Pernikahan Usia Dini Pada Remaja Putri. *Jurnal Kebidanan Malahayati*, 7(1), 17-24
- Riany, E., Yanuarti, R., Pratiwi, B. A., & Angraini, W. (2020). Faktor-Faktor yang Berpengaruh terhadap Pernikahan Usia Dini. *Journal of Telenursing (JOTING)*, 2(2), 158-167.
- Rahawa, I., & Mouliza, N. (2022). Faktor yang Berhubungan dengan Pernikahan Dini pada Remaja Putri di Desa Nanow Kecamatan Teluk Dalam: Factors Related To Early Marriage In Adolescent Women In Nanow Village, Telukdalam District. *Jurnal Ilmiah Kebidanan (Scientific Journal of Midwifery)*, 8(1), 66-73.
- Saryono & Anggraeni, MD 2010, Metodologi Penelitian Kualitatif dalam Bidang Kesehatan,, Nuha Medika, Yogyakarta
- Septianti, D., Mawarni, A., Nugroho, D., & Dharmawan, Y. (2017). Hubungan Pengetahuan Responden dan Faktor Demografi dengan Pernikahan Usia Dini di Kecamatan Banyumanik Tahun 2016. *Jurnal Kesehatan Masyarakat (Undip)*, 5(4), 198-206.

- Vidalia, R. N., & Muhammad Azinar, S. K. M. (2022). Faktor-faktor yang Mempengaruhi Perkawinan Usia Dini di Kecamatan Sukadana. *Jurnal Kesehatan Masyarakat (Undip)*, 10(1), 115-121
- Wahidin, U. (2017). Pendidikan Karakter bagi Remaja. *Edukasi Islami: Jurnal Pendidikan Islam*, 2(03).
- Yanti, E.2012, Gambaran Pengetahuan Remaja Putri tentang Resiko Perkawinan Dini dalam Kehamilan di Kelurahan Medan, Laporan Karya Tulis Ilmiah, Universitas Prima Indonesia, Medan
- Yanti, Y. Hamidah, H., & Wiwita, W. (2018). Analisis Faktor Penyebab dan Dampak Pernikahan Dini di Kecamatan Kandis Kabupaten Siak. *Jurnal Ibu Dan Anak*, 6(2), 96-103

THE RELATIONSHIP BETWEEN KNOWLEDGE AND ATTITUDES WITH THE PRACTICE OF CLEAN AND HEALTHY LIVING IN RANCAGOONG TANJUNGWANGI VILLAGE, TANJUNGMEDAR DISTRICT, SUMEDANG REGENCY IN 2022

Sherly Marcelina ¹, Iis Komala ²
Public Health Science Study Program
Faculty of Health Science, Sebelas April University
sherlymarcelina@unsap.ac.id

Article Info

Article history:

Received April 25, 2022
Revised Mei 02, 2022
Accepted Mei 09, 2022

Keywords:

Knowledge
PHBS in School
Practice PHBS
Attitude

ABSTRACT

PHBS in schools is an activity to empower students, teachers and the school community to adopt a healthy lifestyle to create healthy schools. This study aims to determine the relationship between knowledge and attitudes with clean and healthy living practices at SD Negeri Rancagoong, Tanjungwangi, Tanjungmedar, Sumedang in 2022. This type of research is cross sectional. The population in the study was all school residents at SD Negeri Rancagoong with a total of 127 people, and the research sample found 56 respondents. The instrument used by distributing questionnaires to respondents. Data were analyzed using chi square. It was found that there was a relationship between knowledge ($p = 0.006$) and attitudes ($p = 0.007$) with the practice of PHBS in schools. There is a significant relationship between knowledge and attitudes with PHBS practices in schools. For school residents to be able to apply Clean and Healthy Behavior (PHBS) in the school environment.



Copyright © 2022 PHSAJ. All rights reserved.

Corresponding Author:

Sherly Marcelina
Public Health Science Study Program,
Faculty of Health Science, Sebelas April University,
Jl. Cipadung No.54, Kotakaler, Sumedang Utara, Sumedang, Jawa Barat 45621, Indonesia.
Email: sherlymarcelina@unsap.ac.id

1. INTRODUCTION

Clean and healthy living behavior PHBS is one of the national policies, namely health promotion to support the achievement of the vision of a healthy Indonesia (Kemenkes RI, 2004). Health development is aimed at realizing healthy, intelligent and productive human beings. Health needs to be maintained, maintained and improved by everyone (Depkes 2007)

PHBS in schools is a set of behaviors practiced by students, teachers and the school community on the basis of awareness as a result of learning, so that they can independently prevent disease, improve their health, and play an active role in creating a healthy environment (Aswandi, 2017). There are several indicators that are used as a measure to assess Clean and Healthy Living Behavior in schools, namely: wearing clean and neat clothes, Keeping hair clean and tidy, keeping nails short, wearing clean and neat shoes, exercising regularly and measuredly, not smoking. at school, not using illegal drugs, eradicating mosquito larvae, using clean latrines and senate, using clean water, washing hands with running water and using soap, disposing of garbage

in segregated places (dry, wet, and dangerous waste), consuming snacks healthy people in a healthy canteen and weigh their weight and TB every month to the nearest health service place (Yuningsih, 2019).

1.1. Data analysis

The implementation of PHBS in schools is an absolute necessity along with the emergence of various diseases that often attack school-age children (6-12 years) such as intestinal worms, diarrhea and acute respiratory infections (ARI). According to the World Health Organization (WHO, 2016) the incidence of diarrhea is often associated with polluted water sources, inadequate sanitation and poor hygiene practices, as many as 100,000 Indonesian children die from diarrheal diseases each year, while the Ministry of Health data shows that out of 1,000 residents there are as many as 300 people who suffer from diarrheal disease throughout the year. In addition, worm infection is the biggest cause of disease among children aged 5-14 years, there are still as many as 40-60% of school-age children who suffer from intestinal worms (Afany, 2017). ARI is a disease that is in the top ten diseases in Sumedang Regency based on the report of the Top 10 Diseases, the coverage of ARI case finding in Sumedang Regency in 2019 was 53.23%.

In the research conducted by Ratna (2018), the results showed that students' knowledge of PHBS was mostly sufficient as many as 29 people (55.8%), and less knowledgeable as many as 13 people (25.0%). The results showed that the students' attitudes about PHBS were mostly quite supportive of 33 people (63.5%) and 13 people were not supportive (25.0%). The results showed that the majority of PHBS practices were sufficient as many as 24 people (46.2%) and low PHBS practices as many as 18 people (34.6%). There is a relationship between students' knowledge of PHBS and PHBS practices in students at SDN Jepalo, Gunung Wungkal District, Pati Regency, with a p value of 0.025. There is a relationship between students' attitudes about PHBS and PHBS practices in students at SDN Jepalo Kec. Gunungwungkal Pati Regency in 2018 with p value > 0.001.

1.2. Preliminary Studies

The results of preliminary research through observations and interviews with 63 students at SD Negeri Rancagoong showed that 35 of the 63 students did not know about Clean and Healthy Life Behavior. Among the 63 students interviewed, 41 students had long and black nails, 39 students did not use running water to wash their hands before eating, while 20 other students said that they wash their hands when they remember. School Health Efforts (UKS) exist but are not used properly.

2. METHOD

The type of research used in this study is quantitative, with a cross sectional approach. the variables in this study are independent variables, namely Knowledge and Attitudes in the application of PHBS and the dependent variable is the practice of PHBS in the School Order. The population in this study were all residents of the Rancagoong Elementary School with a total population of 127 people. In this study, sampling using the formula according to Slovin Taking into account the time and effort that tends to be in terms of an error tolerance level of 10%, the number of samples obtained from the total population is 56 people. The technique used in sampling is simple random sampling.

The research instrument used was a questionnaire containing knowledge and attitudes of clean and healthy living behavior (PHBS) and PHBS practices at SD Negeri Rancagoong. The questionnaire used in this study has been used before, therefore there is no need to test the validity and test reliability.

The Maternal and Infant Cohort was chosen as the research instrument. Data analysis was carried out univariate and bivariate. Univariate analysis will produce a frequency distribution table. Meanwhile, bivariate analysis with Chi-Square test (p-value 0.05 interpretation and 5% precision) and Odds Ratio (table 2x2 and 95% CI) used SPSS for windows version 25.0 program.

3. RESULTS AND DISCUSSION

3.1. Results

3.1.1. Frequency distribution based on respondent characteristics

Table 1
Frequency distribution by gender and age of respondents
At Rancagoong State Elementary School

Toddler Characteristics	n	%
Gender		
Male	25	44,6
Female	31	55,4
Total	56	100
Age		
10 years	6	10,7
11 years	22	39,3
12 years	20	35,7
13 years	3	5,3
28 years	1	1,8
32 years	1	1,8
42 years	1	1,8
54 years	2	3,6
Total	56	100

Source: primary data, 2022

Based on table 1, it is known that most of the respondents in this study were female as many as 31 people (55.4%), and most of them were at the age of 11 years as many as 22 people (39.3%).

3.1.2. Univariate Analysis

1. Frequency distribution based on respondent's level of knowledge

Table 2
Frequency distribution based on respondent's level of knowledge
At Rancagoong State Elementary School

Knowledge	N	%
Good Knowledge	31	55,4
Sufficient Knowledge	25	44,6
Poor Knowledge	0	0
Total	56	100,0

Based on the table above, it is known that most of the respondents in this study have good knowledge as many as 31 respondents (55.4%).

2. Frequency distribution based on respondent's attitude

Table 3
Frequency distribution based on respondent's Attitude
At Rancagoong State Elementary School

Attitude	N	%
Good attitude	36	64,3
Sufficient attitude	20	35,7
Poor attitude	0	0
Total	56	100,0

Based on the table above, it is known that most of the respondents in this study have a good attitude as many as 36 respondents (64.3%)

3. Frequency distribution based on respondents' PHBS practices

Table 4
Frequency distribution based on respondent's Attitude
At Rancagoong State Elementary School

Practice	N	%
Good Practice	37	66,1
Sufficient Practice	18	32,1
Poor Practice	1	1,8
Total	56	100,0

Based on the table above, it is known that most of the respondents in this study have good practices, namely 37 respondents (66.1%)

3.1.3 Bivariate Analysis

1. The relationship between PHBS knowledge level and PHBS practice at Rancagoong State Elementary School

Tabel 5
 The relationship between PHBS knowledge level and PHBS practice at SD Negeri Rancagoong

Knowledge Level	PHBS practice						Total	p-value
	Good		Sufficient		Poor			
	N	%	N	%	N	%		
Good	26	46,4	5	8,9	0	0	31	55,4
Sufficient	11	19,6	13	23,2	1	1,8	25	44,6
Poor	0	0	0	0	0	0	0	0
Total	37	66,1	18	32,1	1	1,8	56	100,0

The results of the Chi Square test with a significance level = 0.05, it was found that the p value was 0.006, where $0.006 < 0.05$ which means the null hypothesis (H0) is rejected or in other words statistically based on a significant relationship between knowledge and PHBS practice in elementary school. Rancagoong Country, Tanjungwangi Village, Tanjungmedar District, Sumedang Regency in 2022.

2. The relationship between PHBS attitudes and PHBS practices at SD Negeri Rancagoong

Tabel 6
 The relationship between PHBS attitudes and PHBS practices at SD Negeri Rancagoong

Attitude	PHBS practice						Total	p-value
	Good		Sufficient		Poor			
	N	%	N	%	N	%		
Good	29	51,8	7	12,5	0	0	36	64,3
Sufficient	8	14,3	11	19,6	1	1,8	20	35,7
Poor	0	0	0	0	0	0	0	0
Total	37	66,1	18	32,1	1	1,8	56	100,0

Based on the results of the Chi Square test with a significance level of = 0.05, it was found that the p value was 0.007, where $0.007 < 0.05$ which means the null hypothesis (H0) is rejected or in other words there is a statistically significant relationship between attitudes and PHBS practices. at SD Negeri Rancagoong, Tanjungwangi Village, Tanjungmedar District, Sumedang Regency in 2022.

3.2 Discussion

3.2.1 Univariate Analysis

1. Knowledge

Based on the results of the frequency distribution of respondents' knowledge at SD Negeri Rancagoong, it shows that 56 respondents in this study include 31 respondents (55.4%) having good knowledge and 25 respondents (44.6%) having sufficient knowledge. According to (Notoadmodjo, 2012) in the book (Kholid, 2015), knowledge is the result of "knowing" and this happens after people sense a certain object. Most of human knowledge is obtained from the eyes and ears. Knowledge is also obtained from education, self-experience and the experience of others, the mass media and the environment.

According to research conducted by Syahputri (2017) which shows a significant relationship between knowledge and the practice of implementing PHBS in students with a value of 0.001 or less than 0.05. There is a relationship between the two variables which is a form of the level of student knowledge about PHBS which is more than the sufficient category, this shows that students do not fully know about PHBS in school.

According to the researcher, the level of knowledge of the school community at SD Negeri Rancagoong is in the fairly good category. Because, looking at the facts that most of the respondents answered the questionnaire without understanding the contents of the questions on the questionnaire, there were also those who directly answered the questions, without reading the questionnaire and answered according to what the respondents experienced. Knowledge can be acquired both internally and externally. Internal knowledge is knowledge that comes from oneself based on life experience. Knowledge externally is knowledge obtained from other people or from outside. Knowledge gained internally and externally will increase the knowledge of school residents about clean and healthy living behavior (PHBS).

2. Attitude

Based on the results of the frequency distribution of respondents' attitudes at SD Negeri Rancagoong from 56 respondents, respondents with good attitudes were 36 respondents (64.3%), while respondents with sufficient attitudes were 20 respondents (35.7%). Attitude is a general evaluation that humans make of themselves or others for their reactions or responses to stimuli (objects) that cause feelings accompanied by actions that are in accordance with the object (Randi in Imam, 2011).

According to research conducted by (Nieke et al, 2017) shows there is a relationship between student attitudes and the practice of clean and healthy living behavior, with the value of the Chi square test obtained a probability value of 0.009 or less than 0.05. There is a relationship between the two variables, which is a form of attitude about PHBS practices where many respondents fall into the category of good attitudes, this shows that students already know about PHBS at school.

According to the researcher, the attitude of the school community at SD Negeri Rancagoong is in the fairly good category. This is because there are still some respondents who do not agree that they must keep their nails short and the statement that before going to school shoes must be wiped and cleaned. Meanwhile, most of the respondents had a good attitude towards the statement that they agreed to use school latrines to defecate and urinate and dispose of garbage in the trash cans available at the school.

3. Practice

Based on the results of the frequency distribution of respondents' attitudes at SD Negeri Rancagoong from 56 respondents, respondents with good practice are 37 respondents (66.1%), respondents who practice enough are 18 respondents (32.1%) and respondents who practice less are 1 respondent (1.8%).

Walgito (2010), states that practice is an action that arises as a result of a stimulus. Walgito further explained that the action is divided into 2, namely reflective and non-reflective. Effective action occurs in a spontaneous reaction to the stimulus obtained. non-reflective actions occur from the control of the center of consciousness or the brain.

According to research conducted by Sulastrri 2017 based on data on the Clean and Healthy Behavior of schoolchildren, it shows that 42.2% are categorized as well-behaved and 57.8% have bad behavior. This is due to the internal factors of students, namely the lack of ability to behave in a clean and healthy manner. It's like students still throwing trash away even though there are trash bins available.

According to researchers, some school residents at SD Negeri Rancagoong have sufficient PHBS behavior without knowing how important health is for us and if PHBS is not implemented properly it can have a negative impact on our health such as some students throwing garbage in desk drawers because of external factors so they are lazy to do it. standing or going out to throw garbage outside the classroom and this can cause mosquitoes to nest so that it can create mosquito nests that have an impact on dengue fever. In addition, many respondents do not keep their nails clean because they are lazy to cut their nails regularly.

3.1.2 Bivariate Analysis

1. The relationship between PHBS knowledge level and PHBS practice at Rancagoong State Elementary School

Based on the results of the Chi Square test with a significance level of $= 0.05$, it was found that the p value was 0.006, where $0.006 < 0.05$ which means the null hypothesis (H_0) is rejected or in other words there is a statistically significant relationship between knowledge and PHBS practice. at SD Negeri Rancagoong, Tanjungwangi Village, Tanjungmedar District, Sumedang Regency in 2022.

Based on research conducted by Vinka (2017), the results show that there is a relationship between the level of student knowledge and the practice of clean and healthy living behavior, with the value of the Chi square test obtained a probability value of 0.042. So from these results it can be concluded that there is a relationship between students' knowledge and clean and healthy living behavior.

Researchers assume that knowledge about PHBS has a close relationship with PHBS practices in school settings. Respondents with good knowledge will tend to practice PHBS well, and vice versa, respondents with sufficient knowledge tend to practice PHBS quite well. Good knowledge can be a psychological impetus in growing good attitudes and behavior every day, so it can be said that knowledge is a stimulus to one's actions.

2. The relationship between PHBS attitudes and PHBS practices at the Rancagoong State Elementary School

Based on the results of the Chi Square test with a significance level of $= 0.05$, it was found that the p value was 0.007, where $0.007 < 0.05$ which means the null hypothesis (H_0) is rejected or in other words there is a statistically significant relationship between attitudes and PHBS practices. at SD Negeri Rancagoong, Tanjungwangi Village, Tanjungmedar District, Sumedang Regency in 2022.

Based on research conducted by Belliani (2018), the results show that there is a relationship between attitudes and actions towards clean and healthy living behavior because p value $= 0.021 = 0.05$. In this case, there is a significant relationship between attitudes and PHBS of respondents with the level of closeness of relationship with actions. This shows that the positive attitude of the respondents shown by the attitude of accepting, responding, appreciating, and being responsible for the Clean and Healthy Life Behavior will also have a positive impact on their PHBS (Notoadmodjo, 2012)

The researcher assumes that a person's PHBS attitude is related or related to the practice of PHBS in the school setting. Respondents with good attitudes tend to behave well too, while respondents with moderate attitudes tend to behave fairly as well. This is because attitude is a general evaluation made by humans against themselves or others for reactions or responses to stimuli (objects) that cause feelings accompanied by actions that are in accordance with the object, then a good attitude will cause feelings that are accompanied by actions. good and vice versa.

4. CONCLUSION

1. Characteristics of gender and age of school residents at SD Negeri Rancagoong amounted to 56 respondents, the number of male respondents was 25 respondents (44.6%) and female respondents were 31 respondents (55.4%). Respondents consisting of age 10 years as many as 37 respondents (10.7%), age 11 as many as 22 respondents (39.3%), age 12 as many as 20 respondents (35.7%), age 13 as many as 3 respondents (5.3 %), age 28 is 1 respondent (1.8%), age 32 is 1 respondent (1.8%), age 42 is 1 respondent (1.8%) and age 54 is 1 respondent (3.6%)
2. The level of knowledge of respondents at SD Negeri Rancagoong in the good knowledge category was 31 respondents (55.4%), the sufficient category was 25 respondents (44.6%) and the less category was 0 respondents.
3. Attitudes of respondents in SD Negeri Rancagoong in the good attitude category were 36 respondents (64.3%), the sufficient attitude category was 20 respondents (35.7%) and the attitude category was less as many as 0 respondents.
4. The practice of respondents at SD Negeri Rancagoong in the good practice category is 37 respondents (66.1%), the sufficient practice category is 18 respondents (32.1%) and the less practice category is 1 respondent (1.8%)

5. There is a significant relationship between knowledge and PHBS practice at SD Negeri Rancagoong, Tanjungwangi Village, Tanjungmedar District, Sumedang Regency in 2022, based on the results of the Chi Square test with a p value of 0.006.
6. There is a significant relationship between attitudes and PHBS practices at SD Negeri Rancagoong, Tanjungwangi Village, Tanjungmedar District, Sumedang Regency in 2022, based on the results of the Chi Square test with a p value of 0.007

REFERENCES

- Adriansyah, A. A., & Firdausi, N. J. (2018). Implementasi Perilaku Hidup Bersih Dan Sehat (Phbs) Dalam Membangun Gaya Hidup Sehat Sejak Dini Di Sekolah Dasar Negeri (Sdn) Lengkong 1, Desa Lengkong, Kecamatan Mojoanyar Kabupaten Mojokerto. *Community Development Journal*, 1(2).
- Anggitariyani, A. D. (2020). *Hubungan Perilaku Hidup Bersih Dan Sehat (Phbs) Dengan Kejadian Diare Pada Siswa Sekolah Dasar Islam Terpadu (Sdit) Muhammadiyah Bukit Gajah, Ukui, Pelalawan, Riau* (Doctoral dissertation, Universitas Muhammadiyah Malang).
- Ashari, Agus Erwin, Abdul Ganing, Zrimurti Mappau. (2020). Peningkatan Pengetahuan, Sikap dan Praktik Cuci Tangan Pakai Sabun pada Anak Kelas V Sekolah dasar Melalui Senam Cuci Tangan Pakai Sabun. *Jurnal Ilmiah STIKES Kendal* 10(1).
- Bawole, B. B., Umboh, J. M., & Sumampouw, O. J. (2019). Hubungan Antara Tingkat Pengetahuan Dan Sikap Dengan Tindakan Perilaku Hidup Bersih Dan Sehat Pada Murid Sekolah Dasar GMIM 9 Dan Sekolah Dasar Negeri Inpres Pinangunian Kota Bitung. *KESMAS*, 7(5).
- Belliani. 2018. Hubungan antara Tingkat Pengetahuan dan Sikap dengan Tindakan Perilaku Hidup Bersih dan Sehat pada murid Sekolah Dasar negeri Inpres Pinangunian Kota Bitung. *Jurnal KESMAS*, Vol.7 No. 5
- Chandra, C., Fauzan, A., & Aquarista, M. F. (2017). Hubungan Antara Pengetahuan Dan Sikap Dengan Perilaku Hidup Bersih Dan Sehat (Phbs) Pada Siswa Sekolah Dasar (Sd) Di Kecamatan Cerbon Tahun 2016. *Jurnal Kesmas (Kesehatan Masyarakat) Khatulistiwa*, 4(3), 201-205.
- Dinas Kesehatan Provinsi Jawa Barat, 2020. Profil Kesehatan Provinsi Jawa Barat, 2020.
- Dinkes Kota Waringin Timur, 2018.
- Emilda, E., & Hidayah, M. (2020). Penyuluhan Pola Hidup Bersih Sehat (PHBS) Di SDN 01 Cimanggis Bojonggede Kabupaten Bogor. *Jurnal Pengabdian Masyarakat: Darma Bakti Teuku Umar*, 2(1), 74-83.
- Ginting, M., & Sihite, M. R. (2021). Hubungan Pengetahuan Dan Sikap Siswa Tentang Perilaku Hidup Bersih Dan Sehat (Phbs) Dengan Upaya Pencegahan Diare Di Sd Negeri 030349 Parbuahan. *Jurnal Darma Agung Husada*, 8(2), 83-91.
- Hasanah, U., & Mahardika, D. R. (2021, February). Edukasi Prilaku Cuci Tangan Pakai Sabun Pada Anak Usia Dini Untuk Pencegahan Transmisi Penyakit. In *Prosiding Seminar Nasional Pengabdian Masyarakat LPPM UMJ* (Vol. 1, No. 1).
- Hotmaida, L., Fuadah, F., Buluaro, K., & Febriani, M. (2018). Sosialisasi dan Pemberian Sarana Penunjang Perilaku Hidup Bersih dan Sehat di SD Sukawening Kecamatan Ciwidey Kabupaten Bandung. *Jurnal Abdimas BSI: Jurnal Pengabdian Kepada Masyarakat*, 1(2).
- Kemendes RI. (2016). *Profil kesehatan Indonesia 2016*.
- Merlina, B. (2021). Gambaran Pengetahuan Dan Perilaku Cuci Tangan Pakai Sabun (Ctps) Pada Siswa Sekolah Dasar Di Wilayah Kerja Puskesmas Gedong Tataan. *Ruwa Jurai: Jurnal Kesehatan Lingkungan*, 12(2), 102-107
- Mustar, Y. S., Susanto, I. H., & Bakti, A. P. (2018). Pendidikan Kesehatan: Perilaku Hidup Bersih dan Sehat (PHBS) di Sekolah Dasar. *JISIP (Jurnal Ilmu Sosial dan Pendidikan)*, 2(2).
- Notoadmojo, S. 2007. Kesehatan masyarakat: Ilmu dan seni. Edisi revisi 2011. Jakarta: Rineka Cipta.
- Notoadmojo, S. 2010. Metodologi Penelitian Kesehatan. Cetakan pertama. Jakarta: Rineka Cipta
- Notoadmojo, S. 2014. Promosi Kesehatan dan Perilaku Kesehatan. Cetakan pertama. Jakarta: Rineka Cipta.
- Nurhaeda, N., & Uki, E. (2020). Hubungan Tingkat Pengetahuan Dan Sikap Siswa Dengan Praktek PHBS Di Sekolah Dasar 2 Inpres Lambunu Kecamatan Bolano Lambunu Kabupaten Parigi Moutong: The Relationship Between Students' Knowledge Levels And Attitudes With PHBS Practice At Elementary School 2 Inpres Lambunu, Bolano Lambunu District, Parigi Moutong Regency. *Media Publikasi Penelitian Kebidanan*, 3(1), 8-14.
- Onibala, C., & Rambitan, M. (2021). Hubungan Pengetahuan Perilaku Hidup Bersih dan Sehat dengan Kebersihan Pribadi Siswa di SD Gmim 2 Tondano Kabupaten Minahasa. *Epidemia: Jurnal Kesehatan Masyarakat Unima*, 14-19.

- Tambuwun, N. V., Rumayar, A. A., & Engkeng, S. (2019). HUBUNGAN ANTARA PENGETAHUAN DAN SIKAP DENGAN PERILAKU HIDUP BERSIH DAN SEHAT PADA TATANAN SEKOLAH DI SD NEGERI 23 DAN SD NEGERI 56 MANADO. *KESMAS*, 8(5), 26-33.
- Tanjung, Nelson. (2016). Hubungan pengetahuan dan sikap tentang perilaku hidup bersih dan sehat dengan tindakan PHBS di sd Swasta Luther Kecaatan Siatas barita Tapanuli Utara tahun 2013. *Jurnal Mutiara Kesehatan Masyarakat* 28/11(2016)
- Usoh, J. A., Umboh, J. M., & Kandou, G. D. (2019). Hubungan antara Pengetahuan dan Sikap Siswa dengan Tindakan Perilaku Hidup Bersih dan Sehat di SD Negeri Tumbak Kecamatan Pusomaen Kabupaten Minahasa Tenggara. *e-Biomedik*, 7(2).
- Watulangkow, E. C., Engkeng, S., & Rattu, A. J. M. (2020). Hubungan Antara Pengetahuan dan Sikap Dengan Perilaku Hidup Bersih dan Sehat Pada Peserta Didik di SD Inpres Lemoh Minahasa. *KESMAS*, 9(1).
- Yuliana, A. R., Kudus, D. A. K. H., KM, J. L. R. K. P., & Kudus, J. K. M. K. (2018). Hubungan Pengetahuan Dan Sikap Siswa Tentang Perilaku Hidup Bersih Dan Sehat (Phbs) Dengan Praktik Phbs Di Sdn Jepalo Kecamatan Gunungwungkal.
- Yuningsih, A., 2019. Hubungan Peran Orang Tua Anak Usia Sekolah Dengan Pencapaian 14 Indikator Perilaku Hidup Bersih Dan Sehat Di Sekolah Sd Negeri 2 Waringinsari Kec Langensari Kota Banjar. *Jurnal Kesehatan Mandiri Aktif*, 2(2), pp.76-84.

THE RELATIONSHIP BETWEEN QUALITY OF HEALTH SERVICES AND INTEREST IN PATIENT REVISIT AT TANJUNGSARI INPATIENT HEALTH CENTER IN 2022

Sutisna¹, Herawati²

Public Health Science Study Program
Faculty of Health Science, Sebelas April University
sutisna@unsap.ac.id

Article Info

Article history:

Received April 12, 2022

Revised Mei 20, 2022

Accepted Mei 26, 2022

Keywords:

Tangible,
Reliability,
Responsiveness, Assurance,
Empathy,
Visit Interest

ABSTRACT (10 PT)

Interest in repeat visits is an attitude that arises in response to an object that shows the patient's desire to make a repurchase. During the last two months in 2022, visits to Tanjungsari Health Center were 2,641 in March and 2,142 in April, resulting in a difference of 449 visits. This study aims to determine the relationship between the quality of health services with interest in visits. The type of research used is descriptive quantitative research with a cross-sectional study approach. The sampling technique was carried out by accidental sampling technique. The sample of this study amounted to 96 patients who seek treatment at the Puskesmas. Data analysis performed was univariate and bivariate with Spearman rank test. The results of univariate analysis showed that patients who had good quality perceptions on tangible indicators (physical evidence) were 91.7%, reliability (reliability) 92.7%, responsiveness (responsiveness) 88.5%, assurance (94.8%), and empathy (empathy) 87.5% and as many as 78.1% of patients expressed interest in making a repeat visit. Then the results of the bivariate analysis showed the relationship between tangible (physical evidence) with the patient's interest in repeat visits (p value = 0.020), the relationship between reliability (reliability) and the interest in repeat visits of patients with (p value = 0.006), the relationship between responsiveness (responsiveness) with the patient's interest in repeat visits (p value = 0.001), the relationship between assurance (assurance) and the patient's interest in repeat visits with a value (p = 0.000), and the relationship between empathy (empathy) and the patient's interest in repeat visits with a value (p = 0.000). Thus, it can be concluded that there is a relationship between the quality of health services and the interest in patient return visits at the Tanjungsari Inpatient Health Center UPTD. Therefore, it is hoped that all stakeholders can work together in improving the quality of health services at the Puskesmas.



Copyright © 2022 PHSAJ. All rights reserved.

Corresponding Author:

Sutisna,
Public Health Study Program,
Faculty of Health Science, Sebelas April University
Jalan Cipadung No 54 Sumedang
Email: sutisna@unsap.ac.id

1. INTRODUCTION

Health services are every effort that is carried out alone or jointly in an organization to maintain and improve the health of a person, family, group and or community. A good service must have basic requirements, namely; available and sustainable, acceptable and reasonable, easily accessible, accessible, and of high quality. Good service quality will provide satisfaction to customers which ultimately customers

will reuse and recommend these health services to the people around them. So that it affects repurchase decisions which will later affect consumers about the services provided. Mabow 2009 in (Kunik Afifah 2017), explains that quality service at the Puskesmas means providing services to patients based on quality standards to meet the needs and desires of the community, so that they can obtain satisfaction with increasing patient trust and loyalty to the Puskesmas. To achieve quality and affordable health services, it is necessary to carry out service efforts in accordance with professional standards, namely tangible (physical evidence), reliability (reliability), responsiveness (responsiveness), assurance (guarantee) and empathy (empathy). Revisit interest is a behavior that appears in response to an object that shows the customer's desire to repurchase a product that has been previously purchased. Customers consciously and unconsciously evaluate transactions that have been made. consciously and unconsciously evaluate the transactions that have been made. Interest in patient visits is patient satisfaction to keep visiting certain health facilities and even recommending it to others. The level of consumer satisfaction or dissatisfaction that will affect their behavior (Hamidiyah, 2013 in Azizatul Hamidiah 2013).

The search results and data requests from Open Data Jabar, West Java Province, which consists of 17 regencies and 9 cities show the number of visits by Puskesmas patients with large numbers. 6 Visits consisting of Outpatient, Inpatient and Mental Disorders in 2019 reached 24,928,218 visits. However, in 2020, there was a significant decrease of 5,856,054 so that the number of visits became 19,072,164. According to the data analysis that has been carried out, the decline in the number of visits is influenced by the occurrence of data gaps in several districts/cities so that it affects the annual visit rate. The Sumedang District Health Office consists of 27 sub-districts, each sub-district has one or even two health centers. The number of Puskesmas in Sumedang Regency is 35 Puskesmas. In 2020, according to a search that was also carried out in the West Java Open Data, it showed that the total number of visits to the Puskesmas in Sumedang Regency was 590,918. Tanjungsari Health Center which covers 7 villages as its working area, has health services including general poly, inpatient care, emergency room services, MCH services and basic immunization, dental services, KIP/K services, and pharmacy services. In the last two years, the number of patient visits at the Tanjungsari Health Center has decreased. In 2020, the total number of patient visits was 27,560 visits, while in 2021 the total number of visits was 24,175 visits, so there is a difference of 3,385 visits. Likewise with 2022, in the last two months, namely March and April, the number of patient visits at the Tanjungsari Health Center UPTD decreased by 7. In March, the total monthly patient visits amounted to 2,641 visits while in April it showed 2,142 visits so that there was a difference in the numbers of 449 visits.

A preliminary survey of 10 respondents who had received services at the Tanjungsari Inpatient Health Center UPTD, as many as 2 people said they preferred not to return for treatment when visiting, because respondents considered the distance from their residence to the location of the Puskesmas to be far enough so that respondents preferred to seek treatment at the Poskesdes. or the closest midwife, in addition 1 person considered that the services provided were difficult to flow so that respondents preferred to go to the clinic for treatment and 3 other respondents said that the friendliness of the officers was lacking. However, even so, 4 respondents chose to seek treatment and make return visits because the services are relatively cheap and easy.

2. METHOD

This study uses descriptive quantitative research using a Cross Sectional Study approach, which is an approach that is momentary in nature and is not followed continuously within a certain period of time, and with the aim of knowing the relationship between the independent and dependent variables. This study uses frequency distribution table analysis for univariate analysis and Spearman's rank test for bivariate analysis

3. RESULTS AND DISCUSSION

3.1. Results

Table 1. Tangible

Tangible	Frekuensi	Percent (%)
Good	88	91,7
Enough	8	8,3
Total	96	100

The results showed that the perception of respondents or patients on services in physical form with the highest assessment was in the good category with a total frequency of 88 respondents and a percentage (91.7%) of 96 total respondents.

Table 2. Reliability

Reliability	Frekuensi	Percent (%)
Good	89	92,7
Enough	7	7,3
Total	96	100

The results showed that the respondent's or patient's perception of the service in the form of the reliability of health workers with the highest assessment was in the good category with a total frequency of 89 respondents and a percentage (92.7%) of 96 total respondents.

Table 3. Responsiveness

Responsiveness	Frekuensi	Percent (%)
Good	85	88,5
Enough	9	9,4
Not Enough	2	2,1
Total	96	100

The results showed that the respondent's or patient's perception of services in the form of responsiveness of health workers to services to patients with the lowest assessment was in the unfavorable category with a total frequency of 2 respondents and a percentage (2.1%) of 96 total respondents.

Table 4. Assurance

Assurance	Frekuensi	Percent (%)
Good	91	94,8
Enough	5	5,2
Total	96	100

The results showed that the respondents' or patients' perceptions of services with guaranteed safety provided by health workers for services to patients with the lowest assessment were the sufficient category with a total frequency of 5 respondents and a percentage (5.2%) of 96 total respondents.

Table 5. Emphaty

Emphaty	Frekuensi	Percent (%)
Good	84	87,5
Enough	12	12,5
Total	96	100

The results showed that the respondent's or patient's perception of services in the form of physical empathy for patients with the highest assessment was in the good category with a total frequency of 84 respondents and a percentage (87.5%) of 96 total respondents.

Table 6. Revisit Interest

Revisit Interest	Frekuensi	Percent (%)
Interesd	75	78,1
Not Interesd	21	21,9
Total	96	100

The results showed that the respondent's or patient's perception of services in the form of physical empathy for patients with the highest assessment was in the good category with a total frequency of 84 respondents and a percentage (87.5%) of 96 total respondents.

Table 7. Tangible Relationship with Patient Revisit Interest

Tangible	Revisit Interest		Total	Statistic
	Interest	Not Interest		

	N	%	N	%	N	%	
Good	69	78,4	19	21,6	88	100	p=0,020
Enough	6	75	2	25	8	100	
Total	75	78,1	21	21,9	96	100	

shows that the results obtained by patients with good tangible perception (physical evidence) are the variables that show the highest visiting interest rate, namely 69 respondents with a percentage of 78.4% of the total number of 96 respondents.

In this study, the test used the Spearman rank test so that the p value = 0.020 was obtained. So H0 is rejected ($p < 0.05$) and Ha is accepted, so it can be concluded that there is a significant relationship between tangibles (Physical Evidence) and the interest in repeat visits of patients at the Tanjungsari Inpatient Health Center UPTD. The correlation between the two variables is weak with a positive correlation coefficient number so that the relationship between the independent variable and the dependent variable is in the same direction.

Table 8. Reliability Relationship with Patient Revisit Interest

Reliability	Revisit Interest				Total		Statistic
	Interest		Not Interest		N	%	
	N	%	N	%			
Baik	72	80,9	17	19,1	89	100	p=0,006
Cukup	3	42,9	4	57,1	7	100	
Total	75	78,1	21	21,9	96	100	

shows that the results obtained by patients with good perceptions of reliability are the variables that show the highest visiting interest rate, as many as 72 respondents with a percentage of 80.9% of the total number of 96 respondents. In this study, the test used the Spearman rank test so that the p value = 0.006. So H0 is rejected ($p < 0.05$) and Ha is accepted, so it can be concluded that there is a significant relationship between reliability (reliability) and the patient's interest in repeat visits at the Tanjungsari Inpatient Health Center UPTD. The correlation between the two variables is sufficient with a positive correlation coefficient number so that the relationship between the independent variable and the dependent variable is unidirectional.

Table 9. Responsiveness Relationship with Patient Revisit Interest

Responsiveness	Revisit Interest				Total		Statistic
	Interest		Not Interest		N	%	
	N	%	N	%			
Good	69	82,1	15	17,9	84	100	p=0,001
Enough	4	40	6	60	10	100	
Not Enough	2	100	0	0	2	100	
Total	75	78,1	21	21,9	96	100	

shows that the results obtained by patients with poor perception of responsiveness are variables that show the lowest number of uninterested visits, namely 2 respondents with a percentage of 100% of the total number of 96 respondents.

In this study, the test used the Spearman rank test so that the p value = 0.001 was obtained. So H0 is rejected ($p < 0.05$) and Ha is accepted, so it can be concluded that there is a significant relationship between responsiveness (responsiveness) and the patient's interest in repeat visits at the Tanjungsari Inpatient Health Center UPTD. The correlation between the two variables is sufficient with a positive correlation coefficient number so that the relationship between the independent variable and the dependent variable is unidirectional.

Table 10. Assurance Relationship with Patient Revisit Interest

Assurance	Revisit Interest				Total		Statistic
	Interest		Not Interest		N	%	
	N	%	N	%			
Good	72	79,1	19	20,9	91	100	p=0,000
Enough	3	60	2	40	5	100	

Total	75	78,1	21	21,9	96	100
--------------	-----------	-------------	-----------	-------------	-----------	------------

shows that the results obtained by patients with good assurance perception are the variables that show the highest number of uninterested visits, namely 72 respondents with a percentage of 79.1% of the total number of 96 respondents.

In this study, the test used the Spearman rank test so that the p value = 0.000 was obtained. So H₀ is rejected (p<0.05) and H_a is accepted, so it can be concluded that there is a significant relationship between assurance (guarantee) and the interest in repeat visits of patients at the Tanjungsari Inpatient Health Center UPTD. The correlation between the two variables is sufficient with a positive correlation coefficient number so that the relationship between the independent variable and the dependent variable is unidirectional.

Table. 11 Relationship with Patien Revisit Interest

Empathy	Revisit Interest				Total		Statistic
	Interest		Not Interest		N	%	
	N	%	N	%			
Good	71	84,5	13	15,5	84	100	p=0,000
Enough	4	33,3	8	66,7	12	100	
Total	75	78,1	21	21,9	96	100	

The results obtained by patients with good perception of empathy are variables that show the highest interest in visiting, namely 71 respondents with a percentage of 84.5% of the total number of 96 respondents. In this study, the test used the Spearman rank test so that the p value = 0.000 was obtained. So H₀ is rejected (p<0.05) and H_a is accepted, so it can be concluded that there is a significant relationship between empathy (Empathy) and the patient's interest in repeat visits at the Tanjungsari Inpatient Health Center UPTD. The correlation between the two variables is sufficient with a positive correlation coefficient number so that the relationship between the independent variable and the dependent variable is unidirectional.

3.2. Discussion

In this study, the discussion is presented in the form of a narrative from the research conducted by the researcher. The discussion is adjusted to the research objective, namely knowing the relationship between tangible (physical evidence), reliability (reliability), responsiveness (responsiveness), assurance (guarantee), and empathy (empathy) with the interest of patient re-visit at UPTD Puskesmas Inpatient Tanjungsari in 2022. Based on the results of the analysis that has been carried out in this study, there is a positive or unidirectional and significant relationship between tangible (physical evidence) and the patient's interest in repeat visits with a p-value of 0.020. Tangible (physical evidence) is a matter related to physical facilities that are health facilities. This physical facility is certainly one of the factors that influence the patient's interest to reuse health services at the Tanjungsari Inpatient Health Center UPTD. This means that an increase in physical facilities will be followed by an increase in the number of patient visits, and vice versa, a decrease in physical facilities will be followed by a decrease in patient visits. Of course, in addition to physical evidence, there are also several factors that can influence the interest in patient visits, namely incomplete drugs or severe illness so that they have to go to more adequate health facilities. Based on the results of the analysis that has been carried out in this study, there is a positive or unidirectional and significant relationship between reliability (reliability) and the patient's interest in repeat visits with a p-value of 0.006. Reliability is one of the factors that influence the patient's interest to reuse health services at the Tanjungsari Inpatient Health Center UPTD. This means that an increase in reliability will be followed by an increase in the number of patient visits, and conversely a decrease in reliability will be followed by a decrease in patient visits. Therefore, reliability is very important in an effort to improve the quality of service so that it will encourage patients to visit again. Based on the results of the analysis that has been carried out in this study, there is a positive or unidirectional and significant relationship between Responsiveness (Responsiveness) and the patient's interest in repeat visits with a p-value of 0.001. Thus, sensitivity to patients is an important factor in improving the quality of health services. This is because the attention given by health workers to patients will create a sense of comfort and encourage patients to reuse health services at the Tanjungsari Inpatient Health Center UPTD. Based on the results of the analysis that has been carried out in this study, there is a positive or unidirectional and significant relationship between assurance (guarantee)

and patient re-visit interest of 0.000. A sense of security must of course be owned by patients when seeking treatment at health facilities starting from the examination room which is kept private until the treatment provided by health workers can also convince and give a sense of trust that the treatment that has been received by the patient will not cause problems in the future. That way it can encourage patients to use the services at the Tanjungsari Health Center UPTD repeatedly and even make it possible to recommend them to others. Based on the results of the analysis that has been done in this study, there is a positive or unidirectional and significant relationship between empathy (empathy) and the patient's interest in repeat visits with a p-value of 0.000. The greater the attention, showing the seriousness during treatment will increase the sense of satisfaction with health services so that it can encourage patients to make repeat visits and the number of visits will increase.

4. CONCLUSION (10 pt)

Based on the results of research at the Tanjungsari Inpatient Health Center UPTD regarding the relationship between the quality of health services and the interest in patient repeat visits, the following conclusions can be drawn:

1. Patients who have good quality perceptions on tangible indicators (physical evidence) 91.7%, reliability (reliability) 92.7%, responsiveness (responsiveness) 88.5%, assurance (94.8%), and empathy (empathy) 87.5%.
2. Patients who chose to return to the UPTD of the Tanjungsari Inpatient Health Center were 75 patients or 78.1%.
3. There is a relationship between tangibles (physical evidence) and the interest in repeat visits of patients at the Tanjungsari Inpatient Health Center UPTD, which obtained a p value of 0.020.
4. There is a relationship between reliability (reliability) and the interest in repeat visits of patients at the Tanjungsari Inpatient Health Center UPTD, which obtained a p value of 0.006.
5. There is a relationship between responsiveness (responsiveness) and the interest in repeat visits of patients at the Tanjungsari Inpatient Health Center UPTD, which obtained a p value of 0.001.
6. There is a relationship between assurance (guarantee) and the interest in repeat visits of patients at the UPTD of the Tanjungsari Inpatient Health Center, which obtained a p value of 0.000.
7. There is a relationship between empathy (empathy) and the interest in repeat visits of patients at the Tanjungsari Inpatient Health Center UPTD, which obtained a p value of 0.000.

REFERENCES

- Asari, A., Toloh, B. H., & Sangari, J. R. R. (2018). Pengembangan Ekowisata Bahari Berbasis Masyarakat di Desa Bahoi, Kecamatan Likupang Barat, Kabupaten Minahasa Utara. *Jurnal Ilmiah Platok*, 6(1), 29–41.
- Dewi, L., & Nathania, S. (2018). Pengukuran Aspek Kepuasan Konsumen Le Fluffy Dessert. *Jurnal Bisnis Terapan*, 2(01), 61–72. <https://doi.org/10.24123/jbt.v2i01.1087>
- Dinas Kesehatan Jawa Barat. (2020). *Jumlah Kunjungan Pasien di Fasilitas Pelayanan Kesehatan Tingkat Pertama (Puskesmas) Berdasarkan Kategori Kunjungan di Jawa Barat*. 022.
- Djuwa, A. S. S., Sinaga, M., & Dodo, D. O. (2020). *Media Kesehatan Masyarakat Media Kesehatan Masyarakat*. 2(2), 24–32.
- drg. Oscar Primadi, M. (n.d.). *Profil Kesehatan Indonesia Tahun 2020*.
- Ginting, T., Chairul, M., Pane, P. Y., & Rizal, M. (2021). *Mutu pelayanan dan minat kunjungan ulang pasien rawat jalan di Rumah Sakit X*. 3(2), 60–67. <https://doi.org/10.34012/jpms.v3i2.2031>
- Hairil Akbar, Heriyana Amir, Suci Rahayu Ningsih, W. A. (2020). Hubungan Mutu Pelayanan Petugas Kesehatan Terhadap Minat Kunjungan Ulang Pasien Rawat Jalan di Puskesmas X. *PENA MEDIKA*, 10(2), 8–14.
- Hamidiyah, A. (2016). *Persepsi Tentang Kualitas Pelayanan dengan Minat Kunjungan Ulang*. VII, 121–130.
- Idham Maulana Yusuf. (2018). *IMPLEMENTASI MODIFIKASI PERMAINAN BOLABASKET TERHADAP HASIL BELAJAR SISWA*. 29–38.
- Imas Masturoh, N. A. T. (2018). Metodologi Penelitian Kesehatan. *Bahan Ajar Rekam Medis dan Informasi Kesehatan*.
- Istiqomah, N. U. R. F. (2016). *Hubungan Mutu Pelayanan terhadap Minat Kunjungan Ulang Pasien Rawat Inap Puskesmas II Tambak Kabupaten Banyuman 2015*.

- Kudus, S. (2014). Faktor-Faktor Yang Berhubungan Dengan Minat Kunjungan Ulang PelayananAntenatal Di Poliklinik Kebidanan Rs Islam Sunan Kudus. *Faktor-Faktor Yang Berhubungan Dengan Minat Kunjungan Ulang Pelayanan Antenatal Di Poliklinik Kebidanan Rs Islam Sunan Kudus*, 2(2), 1–15.
- Ningtyas, K & Apriyanto D. (2022). *Kuantifikasi Deteksi Alternatif Model Pelayanan Publik*. ScopindoMedia Pustaka. Google Books
- Nurmalasari. (2014). Pengaruh Kualitas Pelayanan dan Citra terhadap kepuasan mahasiswa pada akademi kebidanan aisyiyah Pontianak. 2(2), 184–197.
- Oscar, B., & Sumirah, D. (2019). Pengaruh Grooming Pada Customer Relations Coordinator (CRC) Terhadap Kepuasan Pelanggan di PT Astra international TBK Toyota Sales Operation (Auto2000) Pasteur. *Jurnal Bisnis dan Pemasaran*, 9(1), 1–11.
- PERATURAN MENTERI KESEHATAN REPUBLIK INDONESIA NOMOR 4 TAHUN 2019 TENTANG STANDAR TEKNIS PEMENUHAN MUTU PELAYANAN DASAR PADA STANDAR PELAYANAN MINIMAL BIDANG KESEHATAN. (2019).
- PERATURAN MENTERI KESEHATAN REPUBLIK INDONESIA NOMOR 74 TAHUN 2016 TENTANG STANDAR PELAYANAN KEFARMASIAN DI PUSKESMAS. (2016).
- PERATURAN PEMERINTAH REPUBLIK INDONESIA NOMOR 32 TAHUN 1996 TENTANG TENAGA KESEHATAN. (1996).
- Permana, M. A. (2018). Pengaruh Mutu pelayanan kesehatan terhadap minat kunjungan ulang pasien ke puskesmas kota medan.
- Prapitasari, R & Hidayatun, N . J (2020) . *Konsep Dayar Mutu Pelayanan Kesehatan*. Indramayu:CV. Adanu Abimata. Google Books
- Purwanto, N. (2019). Variabel Dalam Penelitian Pendidikan. *Jurnal Teknodik*, 6115, 196–215. <https://doi.org/10.32550/teknodik.v0i0.554>
- Qomaryah, A. A. A. (2017). Pengaruh Customer Value terhadap Minat Kunjungan Ulang Pasien RawatJalan di Klinik Spesialis Obstetri Ginekologi Rumah Sakit Islam Siti Aisyah Madiun Tahun 2017.

RELATIONSHIP BETWEEN PHYSICAL ACTIVITY AND DIET WITH DYSMENORRHOEA DEGREE ON STUDENTS OF THE FACULTY OF HEALTH SCIENCES SEBELAS APRIL UNIVERSITY DURING COVID 19 PANDEMIC IN 2022

Witri Dewi Mentari ¹, Febri Nurwanti ²
Public Health Science Study Program
Faculty of Health Science, Sebelas April University
witridewimentari@unsap.ac.id

Article Info

Article history:

Received April 12, 2022
Revised Mei 20, 2022
Accepted Mei 26, 2022

Keywords:

Physical Activity,
Diet, and
Degree of Dysmenorrhea

ABSTRACT

Dysmenorrhea is pain or tenderness in the lower abdomen that occurs during a woman's menstrual cycle. There are several factors that can affect dysmenorrhea, one of which is physical activity and diet, the independent variables in this study are physical activity and diet with the dependent variable being the degree of dysmenorrhea. This study aims to determine the relationship between physical activity and diet with dysmenorrhea degree in Faculty of Health Sciences students, Sebelas April University during COVID-19 pandemic in 2022. This research uses quantitative research method with a cross-sectional observational analytic design. The population in this study were students from the health sciences faculty, amounting to 344 female students with a total sample of 119 female students. The sampling technique used stratified random sampling. The results showed that the frequency of the most dominant degree of dysmenorrhea in the heavy category was 66 respondents (55.5%), light physical activity was the most dominant with 56 respondents (47.1%), and fast food eating patterns were the most dominant in the frequent category with 63 respondents (52.9%). The Chi Square test showed that there is a relationship between physical activity and diet with the degree of dysmenorrhea in students of the Faculty of Health Sciences, Universitas Sebelas April during the COVID-19 pandemic in 2022 with a p-value of 0.000.



Copyright © 2022 PHSAJ. All rights reserved.

Corresponding Author:

Witri Dewi Mentari
Public Health Study Program,
Faculty of Health Science, Sebelas April University
Jalan Cipadung No 54 Sumedang
Email: witridewimentari@unsap.ac.id

1. INTRODUCTION

Dysmenorrhea comes from the Greek word "dys" which means difficult or painful or abnormal. "Meno" means moon and "rrhea" which means flow. Dysmenorrhea is a pain or pain in the lower part of the

abdomen that occurs when a woman has a menstrual cycle. Usually the pain felt reaches its peak within 24 hours and after 2 days it will disappear. (Saraswati, 2019). The incidence of dysmenorrhea in the world is very large, because globally women (84%) have a higher percentage of lack of physical activity than men. According to World Health Organization (WHO) data in 2013 in Sugiyanto's study, the incidence of dysmenorrhoea in Indonesia is as much as 55% among the productive age, because women in Indonesia have a sedentary lifestyle or have a low intensity of physical activity. (Sugiyanto & Luli, 2020). Based on data from indrayani's research in 2021, the incidence of dysmenorrhea in West Java is quite high, namely 54.9% of women experiencing dysmenorrhea, consisting of 24.5% experiencing mild dysmenorrhea, 21.28% experiencing moderate dysmenorrhea and 9.36% experiencing severe dysmenorrhea. (Indrayani & Antiza, 2021). Based on the results of research by Susan, Y, and Yuliani, it was shown that most of the young women at SMK Pelita Al-Ikhsan, Ujungjaya District, Sumedang Regency, expressed moderate pain when experiencing menstruation (35.3%). (Becker et al., 2015)

And based on data from a preliminary study conducted by researchers using a google form survey of health faculty students eleven april there are 10% of people experiencing mild dysmenorrhoea, 60% of people having moderate dysmenorrhoea, and 30% of people having severe dysmenorrhea. The COVID-19 pandemic is suspected to be one of the factors in the severity of primary dysmenorrhea pain due to increased production of prostaglandin hormones due to insufficient physical activity.

The COVID-19 phenomenon that began in Wuhan and spread rapidly globally so that WHO announced the outbreak in March 2020 COVID-19 has become a global pandemic. The number of infected with the coronavirus in the world has reached 517,381,524, and 6,276,731 people have died, 38,637,059 active positive people (still being treated), and 472,467,734 patients have been declared cured. The number of coronavirus cases in Indonesia was 6,048,685 people, while the dead were 156,396 people, and the recovered ones were 5,886,211 people. Thus placing Indonesia in 19th place out of 228 countries and territories in the world affected by the coronavirus pandemic. (Farma,A. 2022).

Physical activity is a body movement produced by skeletal muscles that requires energy expenditure, physical activity is divided into 3 categories, namely light, medium, and heavy. However, when the COVID-19 pandemic has imposed restrictions on outdoor activities, this has caused a decrease in a person's physical activity. Lack of physical activity results in a decrease in the distribution of oxygen in the systemic circulation which results in an increase in a person's perception of the onset of pain, including dysmenorrhea. (According to WHO 2014 in (Pratiwi & Sjattar, 2021). According to the Ministry of Health of the Republic of Indonesia, physical activity is considered sufficient when done for 30 minutes every day or 3-5 days a week. (Tristiana, 2017). However, when the COVID-19 pandemic has imposed restrictions on outdoor activities, this has caused a decrease in a person's physical activity. Low physical activity is a risk factor for various comorbidities such as obesity, diabetes, hypertension, and other health conditions.

Physical activity can reduce the risk of menstrual disorders, exercise can be one of the interventions to reduce the risk of dysmenorrhea events. Exercise can be beneficial in order to increase blood flow to the pelvic part and will also stimulate endorphins that act as non-specific analgesics. Exercise can reduce stress, fatigue, and depressive mood that can usually occur in primary dysmenorrhea. (Tristiana, 2017)

Diet is a way to regulate the quantity of food types so that it can improve the quality of health, psychology, prevention and the process of healing pain. good eating habits always represent the fulfillment of optimal nutrition. (Romance, 2016). The diet that often causes dysmenorrhoea is the pattern of consumption of fast food or fast food, the habit of consuming fast food excessively will have an impact on increasing the cascade of prostaglandins which result in hypertonus and vasoconstriction in the myometrium so that ischemia occurs and this can result in dysmenorrhea. ((Damayanti et al., 2022).

The diet during the Covid pandemic has increased by 3 times a day, especially in consuming fast food because the factor of the number of promo advertisements online makes them interested in buying it, following the prevailing trend matters, including by consuming fast food types of fast food, this is because the presentation is fast so that it can save time, can be served when and in order. (Praja, 2019)

2. METHOD

The types and methods of this research are quantitative, with the design of the Cross Sectional study, which is research conducted to determine the relationship between dependent variables, namely the degree of dysmenorrhoea in students of the faculty of health sciences and independent variables including physical activity and diet. For its measurements using an ordinal scale with the calculation of the likert scale on the measurement of independent variables and the guttman scale for the measurement of dependent

variables. Population is a generalization area consisting of objects / subjects that have a certain quantity and characteristics set by the researcher and then conclusions are drawn. (Nature et al., 2019). The population in this study was students of the faculty of health sciences which amounted to 344 female students. Data collection was carried out in May 2022. The sampling technique in this study is a stratified random sampling technique based on the strata of the study program, so the total number of research samples is 119 students of the faculty of health sciences, university eleven april.

3. RESULTS AND DISCUSSION

3.1. Results

The results of this study can be seen from univariate and bivariate tests, in the univariate analysis this study was carried out to determine the relationship between physical activity and diet with the degree of dysmenorrhoea in students of the Faculty of Health Sciences during the Covid-19 pandemic, so that the results of this univariate analysis helped in testing bivariate analysis with the Chi Square statistical test. Then the univariate and bivariate test results with data processing applications by SPSS 0.16 produce the following data:

Table 1. Frequency Distribution of Physical Activity

No.	Categories	Sum	
		F	Presentasi (%)
1.	Light	56	47.1
2.	Keep	51	42.9
3.	Heavy	12	10.1
	Sum	119	100%

Source: Primary Data 2022

Based on table 6, it can be seen that the frequency that has the most dominant level of physical activity is in the mild category, namely 56 respondents (47.1%).

Table 2. Fast Food Frequency Distribution

No.	Categories	Sum	
		F	Presentation (%)
1.	Infrequently	56	47.1
2.	Often	63	52.9
	Sum	119	100%

Source: Primary Data 2022

Based on table 7, it can be seen that the frequency of fast food diet in female students is the most dominant in the frequent category of 63 respondents (52.9%).

Table 3. Frequency Distribution of Dysmenorrhea Degrees

No.	Categories	Sum	
		F	Presentation (%)
1.	Light	23	19,3
2.	Keep	30	25,1
3.	Heavy	66	55,5
	Sum	119	100%

Source: Primary Data 2022 Based on table 8, it can be seen that the most dominant frequency of dysmenorrhoea degree scale levels is in the weight category of 66 respondents (55.5%).

Table 4. Chi Square Test Results Physical Activity and Degree of Dysmenorrhoea

Physical Activity	Degree of Dysmenorrhoea								Total	<i>p-value</i>	
	No Pain		Light		Keep		Heavy				
	f	%	f	%	f	%	f	%			
Light	0	0	5	8,9	6	10,7	45	80,4	56	100	
Keep	0	0	12	23,5	18	35,3	21	41,2	51	100	0,000
Heavy	0	0	6	50,0	6	50,0	0	0	12	100	
Total	0	0	23	19,3	30	25,2	66	55,5	119	100	

There is a relationship between Physical Activity and the degree of dysmenorrhoea in students of the Faculty of Health Sciences, Sebelas April University during the COVID-19 pandemic in 2022 with a *p*-value of $0.000 < \alpha$. So it can be concluded that H_a being accepted and H_o being rejected means that there is a significant relationship between physical activity and the degree of dysmenorrhoea in students of the university's faculty of health sciences during the covid 19 pandemic in 2022.

Table 5. Chi Square Dietary Test Results and Degrees of Dysmenorrhoea

Consumption diet (fast food)	Degree of Dysmenorrhoea								Total	<i>p-value</i>	
	No. Pain		Light		Keep		Heavy				
	f	%	f	%	f	%	f	%			
Infrequently	0	0	22	39,3	21	37,5	13	23,2	56	100	0,000
Often	0	0	1	1,6	9	14,3	53	84,1	63	100	

Total	0	0	23	19,3	30	25,2	66	55,5	119	100
--------------	----------	----------	-----------	-------------	-----------	-------------	-----------	-------------	------------	------------

There is a relationship between Diet and the degree of dysmenorrhea in students of the Faculty of Health Sciences, Sebelas April University during the COVID-19 pandemic in 2022 with a p-value of $0.000 < \alpha$, it can be concluded that H_a is accepted and H_0 is rejected means a significant relationship between consumption diet (fast food) and dysmenorrhea degrees in students of the faculty of health sciences of the university eleven April during the covid 19 pandemic in 2022.

3.2. Discussion

From the results of the researchers' observations, it can be seen that there is a significant relationship between respondents who do light physical activity and respondents who do moderate and heavy physical activity where respondents who do light physical activity tend to experience a scale of dysmenorrhea degrees with a heavy category, on the contrary, respondents who do moderate and heavy physical activity tend to experience a scale of dysmenorrhea degrees with moderate and mild categories. The results of the study are in line with the study (Sugiyanto & Luli, 2020), showing a meaningful relationship between physical activity and dysmenorrhoea, it was found that respondents with mild physical activity levels tended to be more at risk of experiencing heavier dysmenorrhea.

Based on the theory that there is a meaningful relationship between the habit of physical activity of sports and the incidence of dysmenorrhoea, exercise can be one of the interventions to reduce the risk of dysmenorrhea events, exercise can increase blood flow to the pelvis and will also stimulate endorphins that act as non-specific analgesics. (Tristiana, 2017). In addition, regular physical activity can improve the work system of blood vessels so that it can reduce pain complaints and increase physical freshness. (Febriati, 2016)

From the results of the observations of this study, it can be seen that respondents who often consume fast food can result in a high number of degrees of dysmenorrhoea on a moderate to severe scale and respondents who tend to rarely consume fast food experience a scale of mild dysmenorrhea degrees. However, consuming fast food has now become a habit for students, especially the fair sex and based on research, it is found that most female students do like to consume fast food such as meatballs, instant noodles, seblak, and as for Korean-style snacks that are currently often consumed by female students, these fast food snacks can affect the degree of dysmenorrhoea.

The results of the following study are in line with the study (Praja, 2019), showing that the consumption habit of fast food p value of $0.000 < 0.05$ stated that there was a meaningful relationship between respondents who often consumed fast food with a high degree of dysmenorrhea. This is supported by research that reveals that the diet that often causes dysmenorrhoea is the pattern of consuming fast food or fast food because the factor of the number of promo advertisements online makes you interested in buying it, following the prevailing trend things, including by consuming types of fast food fast food, this is because the presentation is fast so that it can save time, can be served at any time and in order only. (Indahwati et al., 2017).

Based on the theory (Purwaningsih, 2013) fast food is an unhealthy food, this is because the content of fast food contains a lot of fat and is low in nutrients. Consuming foods that contain a lot of fat triggers an increase in the secretion of prostaglandins where these prostaglandins themselves are formed from fatty acids. This increase in prostaglandins and vasopressins is what causes the arteries to develop vasoconstriction and results in the uterus experiencing ischemia which can trigger the production of more prostaglandins, causing dysmenorrhea.

4. CONCLUSION

Berdasarkan hasil penelitian tentang hubungan aktivitas fisik dan pola makan dengan derajat dismenorea pada mahasiswi Fakultas Ilmu Kesehatan Universitas Sebelas April selama pandemi COVID 19 tahun 2022, yang dilakukan pada 119 responden dapat disimpulkan sebagai berikut :

1. Respondents who had a level of physical activity were mostly in the light category, namely 56 respondents (47.1%),
2. Respondents who had a frequency of fast food diets were mostly in the frequent category as many as 63 respondents (52.9%), and Respondents who had a degree of dysmenorrhea were mostly in the.
3. category of severe dysmenorrhea degrees, namely 66 respondents (55.5%), and there were no respondents who did not experience dysmenorrhea.

4. There is a relationship between Physical Activity and Diet with the degree of dysmenorrhea in students of the Faculty of Health Sciences, Sebelas April University during the COVID-19 pandemic in 2022 with a p-value of 0.000.

REFERENCES

- Alam, H. S., Hidasari, F. P., & Triansyah, A. (2019). The Relationship Of Body Mass Index And Macronutrient Intake To Physical Activity In Students Vaccinating 2019 Physical Education Fkip Journal of Education Dan ..., 1–11. <https://jurnal.untan.ac.id/index.php/jdpdp/article/view/54139>
- Romance, R. (2016). No 主観的健康感を中心とした在宅高齢者における健康関連指標に関する共分散構造分析Title. *Revista Brasileira de Ergonomia*, 3(2), 80–91. <https://www.infodesign.org.br/infodesign/article/view/355%0Ahttp://www.abergo.org.br/revista/index.php/ae/article/view/731%0Ahttp://www.abergo.org.br/revista/index.php/ae/article/view/269%0Ahttp://www.abergo.org.br/revista/index.php/ae/article/view/106>
- Becker, F. G., Cleary, M., Team, R. M., Holtermann, H., The, D., Agenda, N., Science, P., Sk, S. K., Hinnebusch, R., Hinnebusch A, R., Rabinovich, I., Olmert, Y., Uld, D. Q. G. L. Q., Ri, W. K. H. U., Lq, V., Frxqwu, W. K. H., Zklfk, E., Edvlg, L. V, Wkh, R. Q., ... ح. فاطمی. (2015). No 主観的健康感を中心とした在宅高齢者における健康関連指標に関する共分散構造分析Title. *Syria Studies*, 7(1), 37–72. https://www.researchgate.net/publication/269107473_What_is_governance/link/548173090cf22525dcb61443/download%0Ahttp://www.econ.upf.edu/~reynal/Civilwars_12December2010.pdf%0Ahttps://think-asia.org/handle/11540/8282%0Ahttps://www.jstor.org/stable/41857625
- Damayanti, A. N., Setyo boedi, B., & Fatmaningrum, W. (2022). Correlation Between Dietary Habbits With Severity of Dysmenorrhea Among Adolescent Girl. *Indonesian Midwifery and Health Sciences Journal*, 6(1), 83–95. <https://doi.org/10.20473/imhsj.v6i1.2022.83-95>
- Febriati, L. D. (2016). Factors Related to the Incidence of Dysmenorrhoea in Students of D III Midwifery Study Program, Faculty of Health Sciences, Respati University Yogyakarta in 2015. *Journal of Medica Respati* ISSN: 1907 - 3887, XI(2), 12–22. medika.respati.ac.id
- Indahwati, A. N., Muftiana, E., & Purwaningroom, D. L. (2017). The Relationship between Consuming Fast Food (Fast Food) with the Incidence of Dysmenorrhea in Young Women at SMP N 1 Ponorogo. *Indonesian Journal for Health Sciences*, 1(2), 7. <https://doi.org/10.24269/ijhs.v1i2.612>
- Indrayani, T., & Antiza, V. (2021). Acupressure Counseling and Training to Reduce Dysmenorrhea Pain in Young Women in Babakan Ciparay Bandung. *Journal Of Community Engagement In Health*, 4(1), 249–253.
- Praja, W. N. (2019). The Relationship between Fast Food Consumption Habits and the Incidence of Dysmenorrhoea in Students of the Sriwijaya University Medical Study Program Class of 2016. 30–41. <https://repository.unsri.ac.id/23598/>
- Pratiwi, R., & Sjattar, H. (2021). The Relationship between Stress and Physical Activity with the Degree of Premenstrual Syndrome in Young Women in Mangasa Village, Makassar City. *Scientific Journal of Brightening Health*, 10(2), 206–214. Purwaningsih, S. (2013).
- Bab Ii Landasan Teori. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699. http://sir.stikom.edu/1062/5/BAB_II.pdf
- Saraswati, P. D. W. (2019). The Relationship between Calcium, Zinc and Vitamin E Consumption Levels with the Incidence of Primary Dysmenorrhoea in Students at Sma Negeri 8 Denpasar. 1, 105–112.
- Sugiyanto, & Luli, N. A. (2020). The Relationship between Physical Activity and Dysmenorrhea Levels in Class XII Students of SMK Negeri 2 Godean Sleman Yogyakarta. *University Research Colloquim* 2020, 7–15. <http://repository.urecol.org/index.php/proceeding/article/view/979>
- Tristiana, A. (2017). The Relationship between Physical Activity and the Incidence of Primary Dysmenorrhea in Students at Pondok Pesantren X in Bogor Regency. *Nursing*, 1, 93.