

KNOWLEDGE AND ATTITUDES OF THE COMMUNITY TOWARDS MALARIA PREVENTION IN PASIRBIDANG VILLAGE, CENTRAL TAPANULI REGENCY IN 2021

Syahrul Khairati¹, Leli Desi Uli Basana², Ermia Gulo³

^{1,2,3}Midwifery D-III Study Program, STIKes Nauli Husada Sibolga, Jl. Kader Manik No.2, Sibolga, North Sumatra, 22533, Indonesia

ARTICLE INFO

Keywords:

Attitudes,
Knowledge,
Prevention Of Malaria Disease.

ABSTRACT

Indonesia is one of the countries in the world that still faces the risk of Malaria. Sarudik Subdistrict is one of the Malaria endemic areas in Central Tapanuli Regency with an Annual Parasite Incidence (API) rate in 2015 of 10.93%. The incidence of malaria is caused by direct contact between female Anopheles mosquitoes and humans and is supported by community behavior. This type of research is a descriptive research that aims to find out the knowledge and attitudes of the community towards malaria prevention in Pasir Village, Central Tapanu Regency. This research was conducted in May 2021. The population in this study was 1,282 households, the sample was obtained by 93 respondents. The data used are primary data and skunder data. The analyzed data descriptively are presented in the frequency distribution table.

E-mail:

syahrulkhairati@gmail.com

Copyright © 2022 Science Midwifery.

1. Introduction

Malaria is a life-threatening disease caused by the parasite Protozoa genus Plasmodium. The disease is transmitted to humans through the bite of a mosquito Anopheles of a female species that acts as a vector. There are five species of Plasmodium sp, namely, Plasmodium falciparum, Plasmodium vivax, Plasmodium ovale, Plasmodium malariae, and Plasmodium Knowlesi (Soedarto, 2011; Ministry of Health of the Republic of Indonesia, 2015).

The number of cases and deaths due to Malaria disease was recorded to be 50% or more at the end of 2010 and to 75% or more by the end of 2014 (World Malaria Report 2014). The World Malaria Report 2015 states that Malaria has affected 106 countries in the world. Based on the Sustainable Development Goals (SDGs) target in the third point which contains "Ensuring a healthy life and encouraging welfare for everyone at all ages" where one of the 13, namely by 2030, ended the epidemic of AIDS, Tuberculosis, Malaria, and neglected tropical diseases, as well as combating Hepatitis, water-sourced diseases and other infectious diseases (SDGs, 2015).

According to WHO 2015 there are 212 million new cases of Malaria Disease, worldwide in the range of 148-304 million. The African region has the largest number of global Malaria cases (90%), followed by Southeast Asia (7%) and the Eastern Mediterranean Region (2%). In 2015 there were an estimated 429,000 deaths due to Malaria (range 235,000 – 639,000) worldwide. Most of these deaths occurred in the African Region (92%), followed by the Southeast Asian Region (6%) and the Mediterranean Region (2%). Between 2010-2015, the incidence rate of Malaria disease (new cases) fell by 21% in Africa and globally. During the same period, the mortality rate of Malaria disease fell by about 29% worldwide and 31% in the African Region.

Other regions have achieved a very impressive reduction in their Malaria disease burden. Since 2010, the mortality rate of Malaria has decreased by 58% in the Western Fascisc Region, by 46% in the Southeast Asia Region, by 37% in the Americas and 6% in the Eastern Mediterranean region. In 2015, the European Region was Malaria-free from all 53 countries in the Region reporting at least 1 year out of zero cases of local Malaria Disease (WHO,2015).

Malaria in Indonesia is spread throughout the island with different degrees of endemicism and can be infected in areas with an altitude of up to 1,800 meters above sea level. Based on data from the Indonesian Health Profile in 2013, it was found that there was a decrease in Malaria pain cases per 1,000 population, namely 1.75% in 2011, by 1.69% in 2012 and by 1.38% in 2013.

However, with the still presence of Malaria pain in Indonesia, it will still reduce the degree of public health (Ministry of Health, 2014). There are five provinces with a higher proportion of Rapid Diagnostic Tests compared to microscopic examinations, namely North Sumatra, Banten, West Nusa Tenggara, West Kalimantan, and West Papua (Ministry of Health, 2015).

North Sumatra Province is an area endemic to Malaria including Langkat Regency, Deli Serdang, Labuhan Batu, Serdang Bedagai, Asahan, Samosir, Central Tapanuli, North Tapanuli, South Tapanuli, Mandailing Natal, Nias, South Nias, Coal, Padang Lawas, North Padang Lawas and North Labuhan Batu Regency. One of the regencies in North Sumatra that is endemic to Malaria such as South Nias Regency is the highest area of Malaria cases in North Sumatra Province, namely 1,163 cases (3.73%), Madina with 1,225 cases (3.12%), Coal with 785 cases (2.07%), Labuhan Batu Utara (Labura) with 658 cases (1.97%) (North Sumatra Health Office, 2015).

Based on the results of a preliminary survey in May 2021 that has been carried out by researchers, based on its geographical location in Sarudik Village, Central Tapanuli Regency, it is located on the edge of the beach and based on the results of observations in sarudik sub-district in Terms of houses, there are several that are considered risky, including in terms of the condition of the walls not tight and the non-installation of gauze wire on the vents and the non-installation of ceilings which have the potential to be a way for mosquitoes to enter, Environmental conditions in this area often occur tides of seawater that reach the land, namely the settlement of residents, causing a lot of standing water, then the behavior of people who often litter results in a lot of garbage scattered in ditches and other places that allow it to become a place for mosquitoes to miss.

2. Research Methods

2.1 Research Type and Design

This type of research is a descriptive study that aims to describe the behavior of the community towards the prevention of malaria in the Sarudik Village, Pasir Field District, Central Tapanuli Regency in 2021.

2.2 Population And Sampel

Population is a generalized area consisting of objects or subjects that have a certain quantity and characteristics set by the researcher to study and then draw conclusions (Sugiyono, 2010). The population in this study was all heads of families in Sarudik Village, Pasir District, Central Tapanuli Regency, which amounted to 1282 heads of families. As for determining the number of samples in this study using the formula Slovin (1960) A total of 93 families.

2.3 Data Analysis Techniques

This research is a type of analytic epidemiological research with a case-control design using secondary data from the results of MBS activities carried out by the Sibolga City Health Service for the period May to November 2020 and primary data from interviews with respondents using questionnaires to obtain behavioral data and individual characteristics of respondents. consists of total cases and selected controls.

3. Result And Discussion

TABLE 1
FREQUENCY DISTRIBUTION OF RESPONDENTS BY AGE

Age	N	%
18-24 Age	2	2,2
25-41 Age	51	54,8
42-60 Age	40	43,0
Total	93	100,0

Midwifery Science

journal homepage: www.midwifery.iocspublisher.org

The distribution of respondent characteristics based on age from the table above shows that of the 93 respondents seen from age, the age of the respondents who are the most respondents are respondents aged 25-41 years, namely 51 respondents (54.8%), followed by respondents aged 42-60 years as many as 40 respondents (43.0%), and 18-24 years as many as 2 respondents (2.2%).

TABLE 2
FREQUENCY DISTRIBUTION OF RESPONDENTS BY GENDER

Gender	n	%
Female	93	100,0
Total	93	100,0

The distribution of respondents' characteristics by gender as seen from table 2 shows that out of 93 respondents, the most gender is female gender by 93 respondents (100%).

TABEL 3
DISTRIBUSI FREKUENSI RESPONDEN BERDASARKAN PENDIDIKAN

Education	n	%
SD	61	65,6
JUNIOR HIGH SCHOOL	15	16,1
SMA/SMK	17	18,3
Total	93	100,0

Based on the table above of 93 respondents, the last education of the respondents, the most numerous were elementary schools with 61 respondents (65.6%), junior high school education by 15 respondents (16.1%), and high school / vocational education by 17 respondents (18.3%).

TABLE 4
DISTRIBUTION OF RESPONDENTS' FREQUENCY BY OCCUPATION

Work	n	%
Housewife	78	83,9
Trader	9	9,7
Seamstress	3	3,2
Businessman	3	3,2
Total	93	100,0

Based on the table above, it is known that the characteristics of 93 respondents based on work there are the most jobs are housewives by 78 respondents (83.9%), work as a trader 9 respondents (9.7%), tailor work 3 respondents (3.2%), and entrepreneurial work 3 respondents (3.2%).

TABLE 5
KNOWLEDGE FREQUENCY DISTRIBUTION RESULTS

Knowledge	n	%
Well	24	25,8
Currently	67	72,0
Low	2	2,2
Total	93	100,0

Based on the table above, it shows that public knowledge in Malaria sufferers in Pasir Bidang Village is in knowledge with a moderate category, namely 67 respondents (72.0%).

3.1 Discussion

The results showed that the last education of respondents who were the most numerous was elementary schools by 61 respondents or 65.6% of respondents whose education was only elementary school, junior high school education was 15 respondents or 16.1% of respondents, and high school / vocational education was 17 respondents or 18% of respondents. Education is an effort to develop personality and abilities inside and outside of school and lasts a lifetime. Education affects the learning process, the higher the education of a person the easier it is for the

person to receive information. With higher education, a person will tend to get information, both from other people and from the mass media.

The more information that comes in, the more knowledge you get about health. Knowledge is closely related to education where it is expected that a person with higher education, then that person will also have a wider knowledge. Work can play an important role in Malaria because it is related to the environmental conditions of the work. Work done outside the home, in the countryside or on plantations will have a greater risk of being bitten by Malaria mosquitoes. The high risk of being bitten by mosquitoes makes this type of work can cause respondents to also have a high risk of getting Malaria. For low-income jobs, it affects the needs of life, including health needs to obtain health services and the consumption of nutritious food.

The results of the distribution of knowledge frequency, showed that public knowledge in Malaria sufferers in Pasir Village in the Field of Central Tapanuli Regency was in knowledge with a moderate category, namely as many as 67 respondents or 72% of respondents in The Sand Village in the Field of Central Tapanuli Regency. This is due to many things, perhaps improper ways of counseling, the response to something depends largely on the characteristics of the person in question, for example: emotional level, intelligence and environment (socio-economic).

The results of this study are in line with Saragih's research (2004) which examined respondents' attitudes about Malaria disease, resulting that most respondents had attitudes in the moderate category, namely 51.6%, good attitudes as much as 38.5% and had low attitudes as much as 9.9%.

Negative public attitudes about malaria and its prevention can be seen in the statement that Malaria disease will heal on its own without the need for treatment that there are respondents who disagree with the statement (40.9%), as well as respondents who disagree if they do not put gauze wire on the vents at risk of malaria disease (38.7%), as well as statements using mosquito nets if one of the family members is exposed to Malaria disease (49.5). Some of these negative attitudes reflect that some people are less concerned about Malaria and its prevention. The negative attitude of the community towards Malaria and its prevention is one of the factors that can cause the occurrence of Malaria disease.

The results of this study are in line with the opinion of Awinda (2004), patient satisfaction is the achievement of optimal results for each patient, there is attention to patient complaints, physical health conditions and responsiveness to patient needs so as to achieve the best balance. Good preventive behavior is generally driven by a positive attitude towards the importance of malaria prevention measures. The attitude of prevention and the search for a good treatment at the time of the malaria incident, shows that the public's understanding to immediately possible take preventive measures in accordance with what is conveyed by health workers and other information media, as well as seeking treatment for the prevention of malaria disease (Ndona Martinus, 2009).

4. Conclusion

The knowledge of respondents on malaria prevention with a moderate category was more, namely 67 (72.0%) respondents than respondents who had good knowledge as many as 24 (25.8%) prescriptions and low as many as 2 (2.2%) respondents. This shows that most families have a strong knowledge in the prevention of Malaria disease. Although there is a small percentage of families who have insufficient knowledge in the prevention of Malaria disease. Respondents have already received information before from health workers.

The attitudes of the respondents obtained in this study were 61 (65.6%) respondents who had a fairly good attitude than respondents who had a good attitude as many as 32 (34.4%) respondents but respondents with unfavorable attitudes were absent. The respondent's fairly good attitude is influenced by the respondent's moderate knowledge. The attitude has not reached the stage of responding, valuing and responsible because the information obtained is still not clear.

The role of health workers according to respondents obtained in this study was 48 respondents or 51.6% supportive of those who did not support as many as 45 respondents or 48.4% because of the importance of the role of health workers to health in Bagan Village in Tanjung Tiram District, Batu Bara Regency. The role of Community Leaders according to respondents who were released through this study, namely as many as 49 respondents or 52.7% did not support it compared to those who supported only 44 respondents or 47.% because some respondents only got health

Midwifery Science

journal homepage: www.midwifery.iocspublisher.org

information through health workers and there was a lack of cooperation between community leaders and existing health workers.

The prevention of respondents obtained in this study was 71 respondents who had good prevention compared to respondents who had a bad attitude as many as 22 respondents. In preventing Malaria, respondents also carried out various preventions. The most important thing for respondents to do was the use of wires in ventilation, wearing mosquito nets when sleeping at night and the use of mosquito repellent or smearing, and should reduce the time to leave the house at night or if you want to leave the house at night, you should use long sleeves. Prevention carried out is already considered to free the ap of family members from the bites of an Anopheles mosquito.

References

- Aisy, S. (2010). Faktor - faktor yang berhubungan dengan kejadian penyakit malaria pada ibu hamil di kecamatan Teluk Betung Barat Kota Bandar Lampung 2010. (Skripsi, Universitas Indonesia). Diakses dari <https://repository.ui.ac.id/39892.pdf>.
- Arikunto, S. (2006). Metode penelitian kualitatif. Jakarta: Bumi Aksara.
- Arsin, A. A. (2012). Malaria di Indonesia: Tinjauan aspek epidemiologi. Makassar: Masagena Press.
- Awinda. (2004). Tingkat kepuasan pasien perusahaan dan pasien pribadi terhadap mutu pelayanan ruang rawat inap kelas III Rumah Sakit Permata Bunda. (Tesis yang tidak dipublikasikan). Fakultas Kesehatan Masyarakat USU, Medan.
- Babba, I. (2007). Faktor risiko yang mempengaruhi kejadian malaria di wilayah kerja Puskesmas Kota Jaya Pura. (Tesis, Universitas Diponegoro). Diakses dari <http://eprints.undip.ac.id/5267/>.
- Dale, P., Sipe, N., Anto, S., Hutajulu, B., Ndoen, E., Papayungan, M., Saikhu, A., & Prabowa, Y. T. (2005). Malaria in Indonesia: A Summary of Recent Research into Its Environmental Relationship. *Southeast Asian J Trop Med Public Health*, 36(1), 1-13.
- Dasril, (2005). Model pengendalian penyakit malaria melalui pendekatan epidemiologi di kecamatan Sei Kepayang Kabupaten Asahan. (Tesis yang tidak dipublikasikan). Fakultas Kesehatan Masyarakat USU, Medan.
- Departemen Kesehatan RI. (2015). Tentang pedoman pengobatan malaria. Diakses dari <https://www.depkes.go.id/download.php?file=download/pusdatin/buletin/buletin-malaria.pdf>.
- Departemen Kesehatan RI. (2013). Riset kesehatan dasar 2013. Diakses dari <http://www.depkes.go.id/resources/download/general/HasilRiskesdas2013.pdf>.
- Dinas Kesehatan Kabupaten Batu Bara. (2015). Profil Kesehatan Kabupaten Batu Bara 2015. Diakses dari http://www.depkes.go.id/resources/download/profil/PROFIL_KAB_KOTA_2015/1219_Sumut_Kab_Batubara_2015.pdf
- Dinas Kesehatan provinsi Sumatera Utara.(2015). Profil Kesehatan Sumatera Utara Tahun 2015. Diakses dari http://www.depkes.go.id/resources/profil/PROFIL_KAB_KOTA_2016/1275_Sumut_Kota_Medan_2015.pdf
- Dinas Kesehatan Provinsi Sumatera Utara, 2015. Profil Kesehatan Provinsi Sumatera Utara Tahun 2014. Diakses dari http://www.depkes.go.id/PROFIL_KAB_KOTA_2014/1270_Sumut_Kota_Medan_2016.pdf.
- Direktur Jendral Pengendalian Penyakit dan Penyehatan Lingkungan. 2014. Pedoman Manajemen Malaria. Diakses dari <http://www.depkes.go.id/resources/download/UnitUtama2015-2019/5.DitjenP2P.pdf>
- Gunawan, S. (2000). Epidemiologi malaria dalam Harijanto P.N., Malaria: Epidemiologi, Pathogenesis, Manifestasi Klinis dan Penanganan. Jakarta: EGC
- Harahap, E. M. (2012). Gambaran pengetahuan tentang pencegahan penyakit malaria di desa Tolang Jae Kecamatan Sayur Matinggi Kabupaten Tapanuli Selatan. (Skripsi, Universitas Sumatera Utara). Diakses dari <http://repository.usu.ac.id/handle/123456789/31477>.
- Harijanto & Paul. (2011). Tatalaksana Malaria untuk Indonesia, dalam *Bulletin Jendela dan Informasi Kesehatan*. Diakses dari <https://www.pusdatin.com/d&q=Harijanto+Paul.+28201129.+Tatalaksana+Malaria+untuk+Indonesia+dalam+Bulletin+Jendela+dan+Informasi+Kesehatan>.
- Hayati, F., Wahyuningsih, N. E. (2008). Hubungan kondisi fisik rumah, lingkungan sekitar rumah dan praktik pencegahan dengan kejadian malaria di wilayah kerja Puskesmas Pangandaran Kabupaten Ciamis. (Tesis, Universitas Gadjah Mada). Diakses dari <https://www.ugm.ac.id>.
- Heldygrad, D. J., Nabuasa, E., & Nayoan, R. C. (2012). Gambaran Pengetahuan Dan Sikap Masyarakat Mengenai Perilaku Pencegahan Malaria Di Desa Oesao Kecamatan Kupang Timur Kab. Kupang. *Jurnal Kesehatan Masyarakat*, 7(1), 32-42.
- Hendra, A. W. (2008). Faktor-faktor yang mempengaruhi pengetahuan. Jakarta: Pustaka Sinar Harapan.