Contents lists available at IOCS

Science Midwifery

journal homepage: www.midwifery.iocspublisher.org

Factors related to nutrition knowledge during pregnancy in the working area of susoh community health centre

Riska Maulidanita[1], Zakiyah[2]

[1]Lecturer of S1 Midwifery Study Program, Helvetia Medan Institute of Health, North Sumatra

[2]Lecturer of D3Midwifery Study Program, STIKes Medika Seuramoe Barat

ARTICLE INFO

Article history:

Received Jun 16, 2023
Revised Jun 21, 2023
Accepted Jun 30, 2023

Keywords:

Age
Education
Environment
Information
Nutrition

ABSTRACT

Poor maternal nutritional status has been linked to adverse birth outcomes however, the relationship between maternal nutrition and birth outcomes is complex influenced by many factors including age, education, environment and information that vary in different populations. The purpose of this study was to find out about factors related to nutritional knowledge during pregnancy in the working area of the Susoh Health Center. This type of research is analytical with a cross sectional approach, the research was carried out at the Susoh Health Center which was conducted in January 2022. The population in this study is all pregnant women in the Susoh health center working area from January to August 2021 which amounted to 119 people. Accidental sampling sample data collection technique, with questionnaire research instruments using univariate analysis. There is a relationship between age, education, environment and information with nutritional knowledge during pregnancy in the working area of Susoh Community Health Centre.

Corresponding Author:

Riska Maulidanita,
Lecturer of S1 Midwifery Study Program,
Helvetia Institut of Health,
Jl. Kapten Sumarsono No.107, Kp. Lalang, Kec. Sunggal, Kabupaten Deli Serdang, Sumatera Utara 20124
Email: riskamaulidanita@helvetia.ac.id

INTRODUCTION

Nutrition and nutrition of pregnant women is an important thing that must be fulfilled during pregnancy. Good nutrition and nutrition during pregnancy is very helpful for pregnant women and fetuses to stay healthy. Nutritional intake during pregnancy remains a thing that needs to be considered for uterine health. Pregnant women should receive good nutritional intake including four healthy five perfect. Growth, development and optimal health depend on good nutrition and the amount and quality of nutrients consumed. (Hardiyanti, 2021).

During pregnancy, the mother's weight gain affects the growth of the fetus. The small size of neonates at birth is due to poor growth and short gestational age, and the most unfavorable outcomes occur in the most mature babies. Low body weight during pregnancy is associated with an increased risk of premature birth while low maternal weight in the second and third trimesters has been shown to be associated with the risk of spontaneous preterm birth.(Mamuroh et al., 2019) 454In the period of pregnancy the mother supplies all the nutrients to the developing baby. Your baby's life support system grows throughout pregnancy, developing as needed to meet growing

needs. Mothers also need to prepare themselves to feed the baby immediately after birth by storing some of the nutrients that the baby will receive in the form of breast milk. (Bohari & Gaffar, 2021) Then a mother's nutritional needs are not only enough for herself but her baby as well. Every pregnant woman has different nutritional needs. Nutritional needs are not only reviewed from the portion of food, but also determined on the quality of the nutritional intake contained therein. Early in the first trimester of pregnancy, nausea and vomiting in the morning (morning sicknes) are often experienced. Changes in behavior and physical changes in pregnant women occur due to hormonal changes. The hormone Human Chorionic Gonadotropin (HCG) triggers the occurrence of nausea, produced by the developing placenta ensuring. (Endah Mulyani et al., 2020).

One of the nutritional needs that need to be adjusted during pregnancy is related to vitamin and mineral intake Ahmar Hamdiah. According to the statistics of infant mortality in Indonesia, 90% is caused by low birthweight, this figure is very high compared to our developing neighboring countries, one of the factors is the age of the mother who is too easy to get pregnant. (Ahmar et al., 2020)

If the mother experiences nutritional deficiencies during pregnancy will cause problems, both in the mother and the fetus she contains, including: anemia, bleeding and the mother's weight does not increase normally, lack of nutrition can also affect the labor process which can result in difficult and long labor, premature, bleeding after delivery, lack of nutrition can also affect fetal growth and can cause miscarriage, abortion, congenital defects and low birth weight of the baby. (Simbolon, 2018)

Low level of knowledge causes mothers not to understand how to fulfill the nutrients needed by pregnant women during their pregnancy, maternal mortality and infant mortality rates are essentially determined by the nutritional status of pregnant women, poor nutritional status tends to give birth to babies with low birth weight and is faced with greater mortality than babies born by mothers with good and optimal nutritional status. (Wulandari, 2019)

Seven factors affect knowledge, namely age, education, environment, occupation, socio-economy, experience and information obtained. In the Journal of Nutrions and Food Science (Chen et al., 2018) entitled Assessment of Knowledge of Pregnant Mothers on Maternal Nutrition and Associated Factors in Guto Gida Woreda, East Wollega Zone, Ethiopia (Daba et al., 2013) states that there are several factors that affect pregnant women's knowledge about nutrition during pregnancy, namely Educational level, monthly income, and nutrion information during pregnancy gap between pregnancies had strong statistical association wit the knowledge of mother on nutrition during pregnancy.

Research conducted by Arifin Rochman (2016) entitled "The Relationship of the Level of Maternal Knowledge about the Nutritional Needs of Pregnant Women with the Nutritional Status of Pregnant Women at the Pleret Bantul Health Center: the results of a significant relationship between the knowledge of pregnant women about nutritional needs and the nutritional status of pregnant women (p value = 0.0001) in the study also said that pregnant women who have knowledge about nutritional needs are certainly aware of the impact of not The fulfillment of nutrition, pregnant women certainly do not want to experience interference during labor and affect the process of fetal growth and can cause miscarriage. (Rochman & Arifin, n.d.)

Assistance to pregnant women is one form of community service activities with the aim of increasing community participation in improving the degree of maternal and child health. This in the long term aims to reduce morbidity and maternal and infant mortality rates which have been quite high in Indonesia. Pregnant women are polluters who are at risk of health problems. This is due to several factors including educational, age and biological factors, and environmental factors.(Nurvembrianti et al., 2021)

Research conducted by E Retnaningtyas with the title Efforts to increase knowledge of pregnant women through education about the nutritional needs of pregnant women that During pregnancy, some of the nutrient needs will increase. The important thing that must be considered

by pregnant women is that the food consumed consists of a balanced menu arrangement. The purpose of this community service is to increase the knowledge of pregnant women about pregnancy nutrition. This activity is carried out by providing counseling with leaflets to pregnant women about pregnancy nutrition by providing pre-tests before counseling and post-tests after counseling. This counseling was carried out at Kartika Husada Donomulyo Clinic Malang. which was attended by 10 pregnant women by carrying out the Covid 19 Health Protocol. The results of counseling obtained an increase in knowledge by 50%. Before counseling was given, as many as 3 pregnant women (30%) with Good knowledge and after the activity there was an increase to 8 pregnant women (80%).(Retnaningtyas et al., 2022)

Since the outbreak of the COVID-19 pandemic, there have been many recommendations to take supplements or vitamins to increase endurance. (Tandra, 2021) A supplement is a product that contains one or more vitamins, minerals, amino acids, fatty acids and fiber. Supplements are not a complete meal replacement but we still need to eat a variety of healthy foods to meet daily needs. Supplements are not like drugs, supplements are not intended to overcome, diagnose, prevent or cure diseases in fact, some supplements contain active ingredients that have biological effects in the body so that they can be harmful if not used appropriately. Some things that need to be considered in choosing and using supplements or vitamins first is to ascertain whether you really need to consume or need supplements. (Azizah & Fatmawati, 2020)

Based on the results of a preliminary study at the Susoh Health Center, data on pregnant women who experienced Chronic Energy Deficiency (SEZ) were obtained totaling 25 people including from January 3 people, February 6 people, March 2 people, April 2 people, May 4 people, June 4 people, July 2 people, August 2 people and 28 pregnant women who experienced anemia from the total number of 119 pregnant women. The results of interviews that the author conducted with 10 pregnant women including 2 people with low education, 2 people aged 18 years, 2 people who influenced lifestyle, and 1 person who did not understand nutritional problems. The food eaten daily was only as desired but they did not know whether the food was nutritious or not and 3 mothers said they already understood the importance of nutrition during pregnancy because they had received counseling about nutrition during pregnancy at the posyandu. This research needs to be done because if more and more pregnant women experience chronic lack of energy, they will be at risk of postpartum hemorrhage, giving birth with low birth weight and at risk of giving birth to children with stunting conditions. In this study also prioritized behavioral changes in pregnant women who experience energy deficiency, monitoring for approximately 2 weeks to be able to provide follow-up actions if there has been no change. Because of the hope of researchers to change the behavior of pregnant women both in food consumption and rest patterns.

RESEARCH METHOD

This research is analytical with a cross sectional approach is a study where data collection is carried out simultaneously or all at once. (Hidayat, 2015) This study aims to see factors related to nutritional knowledge during pregnancy in the working area of UPTD Susoh Health Center, Southwest Aceh Regency. The population in this study is all pregnant women in the UPTD Susoh Health Center working area, Southwest Aceh Regency from January to August 2021, totaling 119 people. The sample in this study was pregnant women who visited the Susoh Health Center at the time of the study. Sampling techniques with accidental sampling are samples that are available or happen to exist. The number of samples in this study was 92 respondents.

RESULTS AND DISCUSSIONS

Table 1. The Relationship Between Age and Nutrition Knowledge During Pregnancy in the Working Area of Susoh Community Health Centre

No	Age	Knowledge	Sum	*p*

		High		Low				
		f	%	f	%	F	%	
1	Not High Risk	22	37.9	36	62.1	58	100	0,046
2	High Risk	21	61.8	13	38.2	34	100	
	Sum	43	46.7	49	53.3	92	100	

Based on table 1, it can be seen that of the 34 respondents with a resti age, there were 38.2% who had low knowledge about nutrition during pregnancy, while from 58 respondents with a non-restive age, there were 62.1% who had low knowledge.

Table 2. The Relationship Between Education and Nutrition Knowledge During Pregnancy in the Working Area of Susoh Community Health Centre

No	Education	Pengetahuan				Sum		*p*
		High		Low				
		f	%	f	%	F	%	
1	High	18	69.2	8	30.8	26	100	0,016
2	Medium	14	43.8	18	56.3	32	100	
3	Base	11	32.4	23	67.6	34	100	
	Sum	43	46.7	49	53.5	92	100	

Based on table 2, it can be seen that of the 26 respondents with higher education, there were 69.2% who had high knowledge about nutrition during pregnancy, while from 32 respondents with secondary education there were 43.8% with high knowledge, and from 34 respondents with basic education, there were 46.7% with high knowledge.

Table 3. Environmental Relationship with Nutrition Knowledge During Pregnancy in the Working Area of Susoh Community Health Centre

No	Environment	Knowledge				Sum		*p*
		High		Low				
		f	%	f	%	F	%	
1	Support	30	57.7	22	42.3	52	100	0,014
2	Does not support	13	32.5	27	67.5	40	100	
	Sum	43	46.7	49	53.5	92	100	

Based on table 3, it can be seen that of the 52 respondents with a supportive environment, there were 42.3% who had low knowledge about nutrition during pregnancy, while from 40 respondents with an unsupportive environment, there were 67.5% with low knowledge.

Table 4. The Relationship of Information with Nutrition Knowledge During Pregnancy in the Working Area of Susoh Community Health Centre

No	Information	Knowledge				Sum		*p*
		High		Low				
		f	%	f	%	F	%	
1	Often	42	82.4	9	17.6	51	100	0,000
2	Seldom	1	2.4	40	97.6	41	100	
	Sum	43	46.7	49	53.5	92	100	

Based on table 4, it can be seen that of the 51 respondents with frequent information, 82.4% had high knowledge about nutrition during pregnancy, while of the 41 respondents with rare information, 97.6% had low knowledge.

Based on the results of the study, it can be concluded that from 34 respondents with a resti age, there were respondents with low knowledge about nutritional knowledge during pregnancy,

while from 58 respondents with non-resti age, there were respondents with low knowledge about nutritional knowledge during pregnancy. The results of statistical analysis using the chi-square test can be concluded that there is a relationship between the age of pregnant women and nutritional knowledge during pregnancy in the Working Area of Susoh Community Health Centre.

The results of this study are also in line with the research of Sulistiyanti Anik and Andarwati Aprilia entitled "Level of Knowledge and Attitudes of Pregnant Women About Nutrition During Pregnancy in Sriatun Pacitan Independent Practice Midwife" showing the results that there is a relationship between the age of pregnant women and the level of knowledge of pregnant women based on the results of research that has been done, showing that the highest number are respondents with sufficient knowledge levels, which is as many as 21 respondents. The highest data obtained were pregnant women with the age group of 20-35 years, which was 22 respondents. With increasing age, a person will change in physical and psychological aspects (mental).(Sulistiyanti & Andarwati, 2013)

This is in accordance with the theory that states age is a variable that has been considered in epidemiological investigations, namely in morbidity or mortality rates, almost all conditions indicate the state of a person's age. Age is one of the important things in influencing one's knowledge. that the higher a person's age the higher his level of knowledge and this is gained from his experience, and this will affect what a person will do. (Nangi et al., 2019)

The age of a woman at the time of pregnancy should not be too young and not too old, the age of less than 20 years and more than 35 years is at high risk for childbirth. A woman's readiness to conceive also includes physical, emotional, psychological, social and economic readiness. Juveniles are individuals aged 10-19 years. The main causes of death in women aged 15-19 years are complications of pregnancy, childbirth, and complications of miscarriage.(Sjahriani & Faridah, 2019)

Problems in the form of nutritional deficiencies include macronutrient deficiencies and micronutrient deficiencies. SEZ is included in the problem of macronutrient deficiency, where the body chronically or chronically experiences a lack of intake of energy sources and protein. Pregnant women who experience SEZ, due to lack of energy and protein will experience problems with their womb, often will give birth to low birth weight babies which will be associated with baby growth disorders in the form of less height or stunting.(Ismawati et al., 2021)

Research conducted by Lim Z.X The current study found that doctor, nurse and mass media played a major role in delivering information regarding maternal nutrition during pregnancy. This result may be explained by the fact that doctors and nurses are healthcare professionals have frequent contact with antenatal mothers during their antenatal check-up. It is somewhat surprising that antenatal mothers rarely obtained information from the dietitian but from friends and family members. For this reason, it seems possible that the lack of role of the dietician may be explained that nutrition information was accessible for antenatal mothers with a medical condition who require the specialized intake of food sources. (Lim et al., 2018)

Research conducted by Anja Oechsle Of the surveyed women, 70.8% did not know about the contents of recommended nutrition and 54.5% did not know about avoidable nutrition. Moreover, 63.0% believed that more than one cup of coffee per day is safe, while 37.0% agreed with the recommendations on not consuming more than one cup of coffee per day. However, 93.2% did not know the recommended supplementations during pregnancy. Concerning the intensity of physical activity, 98.6% of the participants agreed with the statement that a pregnant woman should perform moderate physical activity for at least 20 min per day. However, 48.1% did not know what kind of physical activity is recommended during pregnancy. On the question of how to deal with influenza and medication during pregnancy, 99.5% answered correctly that an appointment with a physician is necessary. Concerning oral health, 96.6% of the participants were aware that teeth are more susceptible to tooth decay and gingivitis during pregnancy.(Oechsle et al., 2020)

Based on the results of NWD research, Ekayanti said that the results of the study found that the implementation of classes for pregnant women had a significant influence on increasing maternal knowledge about stunting prevention. The attitude and behavior of the mother during pregnancy is supported by the mother's knowledge of her pregnancy. A mother who has knowledge and attitudes about nutrition that is lacking will greatly affect her nutritional status, because good knowledge is related to providing a balanced menu selection.(Ekayanthi & Suryani, 2019)

Research conducted by Sri Lestari Apriliani, et al that overall data, nutritional knowledge of pregnant women in Kertasari District, Bandung Regency includes knowledge about balanced nutrition guidelines, recommended portions of food, functions and sources of nutrients as well as the consequences of lack and excess nutrition for pregnant women.(Apriliani et al., 2019)

The results of research conducted by Eti Rimawati, et al that the provision of Fe supplements, consumption of foods containing iron such as sweet potatoes, and consumption of foods containing Fe absorption aids (Fe enhancers) such as tinutuan, fruits containing vitamin C such as guava juice, red spinach and beets, as well as foods high in vitamins B9 and B12 such as green beans and seaweed can increase blood hemoglobin levels in pregnant women. In addition, restrictions on foods that contain substances that can inhibit the absorption (inhibitors) of Fe also affect to optimize the absorption of Fe in the body with the conclusion that pregnant women need to increase consumption of foods containing vitamins C, B12, folic acid and protein to increase Fe absorption in the body and avoid consuming food sources of Fe along with foods that can inhibit Fe absorption such as tea, coffee and milk.(Rimawati et al., 2018)

Based on the results of the study, it can be concluded that from 26 respondents with higher education, there were respondents with high knowledge about nutrition during pregnancy, while from 32 respondents with secondary education, there were respondents with high knowledge, and from 34 respondents with basic education, there were respondents with high knowledge. The results of statistical analysis using the chi-square test can be concluded that there is a relationship between education of pregnant women and nutritional knowledge during pregnancy in working area of Susoh Community Health Centre

Anemia in pregnancy can have a harmful impact on the mother and fetus. Anemia in pregnancy can cause abortion, premature partus, partuslama, placental retention, postpartum hemorrhage due to uterine atony, shock, intrapartum and postpartum infections. Very severe anemia with an Hb of less than 4 g/dl can cause cordic decompensation. As a result of anema on the fetus can cause intrauterine fetal death, birth with anemia can occur congenital defects, babies are easily infected until perintal death.(Sandhi, 2021)

Based on the results of the study, it can be concluded that from 51 respondents with frequent information, there are respondents with high knowledge about nutrition during pregnancy, while from 41 respondents with rare information, there are respondents who have low knowledge. The results of statistical analysis using the chi-square test can be concluded that there is a relationship between the information obtained by pregnant women and nutritional knowledge during pregnancy in the working of Susoh Community Health Centre.

CONCLUSION

The results of research that have been carried out obtained the relationship between age, education, environment and information with nutritional knowledge during pregnancy work at the Susoh Health Center. This allows the morbidity rate or mortality rate with almost all circumstances indicating that a person's age is one of the important things in influencing a person's knowledge. that the higher a person's age, the higher his level of knowledge and this is obtained from experience and education. That the level of education in the place of research is mostly elementary and junior high school graduates. Then the knowledge or understanding obtained is

very low. Possibility of not understanding about nutritional issues during pregnancy. So it is necessary to re-educate the consumption of nutritious foods during pregnancy. Nutrition during pregnancy due to lack of socialization and participation from health workers, cross-sectoral and village apparatus in increasing community knowledge, especially about nutrition during pregnancy both through counseling, posters and banners that convey information about nutrition. So researchers have collaborated with local health workers in conducting education on food consumption during pregnancy. This is also one of providing direct information to the community, especially pregnant women in providing knowledge so that information obtained from various sources will affect a person's level of knowledge. When someone obtains information, they tend to have broader knowledge. This has been done by researchers in increasing knowledge and disseminating information to be followed up and conveyed to further pregnant women or improve the nutritional condition of current pregnant women whose gestational age is still Trimester 1 and Trimester 2 with the hope that in Trimester 3 pregnancy has good nutritional conditions so that it is not at risk at the time of delivery.

References

Ahmar, H., Budi, P., Ahmad, M., Mushawwir, A., & Khaidir, Z. (2020). Penerapan Model Pembelajaran Problem Based Learning: Literature Review. *Jurnal Keperawatan Muhammadiyah*, *5*(2).

Apriliani, S. L., Nikmawati, E. E., & Yulia, C. (2019). Pengetahuan Gizi Ibu hamil di kecamatan kertasari Kabupaten bandung. *Media Pendidikan, Gizi, Dan Kuliner*, *8*(2).

Azizah, N., & Fatmawati, D. A. (2020). Nutrisi Saat Kehamilan Dimasa Pandemi COVID-19. *Jurnal EDUNursing*, *4*(2), 93–102.

Bohari, N. H., & Gaffar, H. R. (2021). Pentingnya Gizi Pada Ibu Hamil Di Masa Pandemi Covid 19. *JMM (Jurnal Masyarakat Mandiri)*, *5*(4), 1886–1893.

Chen, Y., Michalak, M., & Agellon, L. B. (2018). Focus: Nutrition and food science: Importance of nutrients and nutrient metabolism on human health. *The Yale Journal of Biology and Medicine*, *91*(2), 95.

Daba, G., Beyene, F., Fekadu, H., & Garoma, W. (2013). Assessment of knowledge of pregnant mothers on maternal nutrition and associated factors in Guto Gida Woreda, East Wollega Zone, Ethiopia. *Journal of Nutrition & Food Sciences*, *3*(6), 1.

Ekayanthi, N. W. D., & Suryani, P. (2019). Edukasi gizi pada ibu hamil mencegah stunting pada kelas ibu hamil. *Jurnal Kesehatan*, *10*(3), 312–319.

Endah Mulyani, S. S. T., Diani Octaviyanti Handajani, S. S. T., & Safriana, R. E. (2020). *Buku Ajar Kesehatan Reproduksi Wanita*. Literasi Nusantara.

Hardiyanti, P. (2021). *Tinjauan pustaka pentingnya kesehatan zat gizi ibu hamil disaat pandemi covid-19*.

Hidayat, A. A. (2015). *Metode penelitian kesehatan paradigma kuantitatif*. Health Books Publishing.

Ismawati, V., Kurniati, F. D., Suryati, E. O., & Oktavianto, E. (2021). Kejadian stunting pada balita dipengaruhi oleh riwayat Kurang Energi Kronik pada ibu hamil. *Syifa'Medika: Jurnal Kedokteran Dan Kesehatan*, *11*(2), 126–138.

Lim, Z. X., Wong, J. L., Lim, P. Y., & Soon, L. K. (2018). Knowledge of nutrition during pregnancy and associated factors among antenatal mothers. *International Journal of Public Health and Clinical Sciences*, *5*(1), 117–128.

Mamuroh, L., Sukmawati, S., & Widiasih, R. (2019). Pengetahuan Ibu Hamil tentang Gizi Selama Kehamilan pada Salah Satu Desa di Kabupaten Garut. *Jurnal Ilmiah Keperawatan Sai Betik*, *15*(1), 66–70.

Nangi, M. G., Yanti, F., & Lestari, S. A. (2019). *Dasar Epidemiologi*. Deepublish.

Nurvembrianti, I., Purnamasari, I., & Sundari, A. (2021). Pendampingan ibu hamil dalam upaya peningkatan status gizi. *Jurnal Inovasi & Terapan Pengabdian Masyarakat*, *1*(2), 50–55.

Oechsle, A., Wensing, M., Ullrich, C., & Bombana, M. (2020). Health knowledge of lifestyle-related risks during pregnancy: A cross-sectional study of pregnant women in Germany. *International Journal of Environmental Research and Public Health*, *17*(22), 8626.

Retnaningtyas, E., Kartikawati, E., & Nilawati, D. (2022). Upaya peningkatan pengetahuan ibu hamil melalui edukasi mengenai kebutuhan nutrisi ibu hamil. *ADI Pengabdian Kepada Masyarakat*, *2*(2), 19–24.

Rimawati, E., Kusumawati, E., Gamelia, E., & Nugraheni, S. A. (2018). Intervensi Suplemen Makanan Untuk Meningkatkan Kadar Hemoglobin Pada Ibu Hamil. *Jurnal Ilmu Kesehatan Masyarakat*, *9*(3), 161–170.

Rochman, A., & Arifin, H. (n.d.). *FOTOGRAFI NUDE DALAM SOCIAL MEDIA*.

Sandhi, S. I. (2021). Pengaruh Kekurangan Energi Kronik (KEK) terhadap Kejadian Anemia Pada Ibu Hamil Di Puskesmas Cepiring Kabupaten Kendal. *Jurnal Kebidanan Indonesia*, *12*(1).

Simbolon, D. (2018). *Modul Edukasi Gizi Pencegahan dan Penanggulangan Kurang Energi Kronik (Kek) dan Anemia Pada Ibu Hamil*. Deepublish.

Sjahriani, T., & Faridah, V. (2019). Faktor-faktor yang berhubungan dengan kejadian anemia pada ibu hamil. *Jurnal Kebidanan*, *5*(2), 106–115.

Sulistiyanti, A., & Andarwati, A. (2013). Tingkat Pengetahuan dan Sikap Ibu Hamil Tentang Nutrisi Selama Kehamilan di Bidan Praktik Mandiri Sriatun Pacitan. *Infokes: Jurnal Ilmiah Rekam Medis Dan Informatika Kesehatan*, *3*(3).

Tandra, H. (2021). *VIRUS CORONA BARU COVID-19: Kenali, Cegah, Lindungi Diri Sendiri & Orang Lain*. Rapha Publishing.

Wulandari, W. (2019). *Asuhan Keperawatan Pada Pasien Dengan Diabetes Mellitus Tipe Ii Di Ruang Flamboyan Rsud Abdul Wahab Sjahranie Samarinda*.