FACTORS ASSOCIATED WITH THE ULTRASOUND EXAMINATION SELECTION BY PREGNANT WOMEN IN LEREP PRIMARY HEALTHCARE

Novita Alfiani, Nanik Suraningsih

Universitas Widya Husada Semarang

Email Korespondensi: novita.learning@gmail.com

Submitted: Jun 25th 2023 Revised: Jul 29th 2023 Accepted:Feb 5th 2024 Published: Jul 3rd 2024

ABSTRACT

Ultrasound is a way to find out the fetus's condition in the body during prenatal care (antenatal care). This research aim was to determine the correlation between knowledge, parity, motivation, and husband's support with the choice of ultrasound examination by pregnant women at the Lerep Primary Health Care, Semarang Regency. This research is a descriptive study which is an analytic survey with a cross-sectional design. The population used in this research were third-trimester pregnant women who had their pregnancies checked at the Lerep Primary Health Care, Semarang Regency, with as many as 98 people. Sampling was conducted using non-probability sampling with accidental sampling techniques and a total of 50 people were obtained. Data collection was carried out using a questionnaire. Data analysis using chi-square. The results showed a significant relationship between the knowledge of pregnant women and the choice of ultrasound examination, there was no significant relationship between parity and the choice of ultrasound examination, and there was no significant relationship between the husband's support with the choice of ultrasound examination. With this research, it is hoped that primary health care can give some improvement in education and information for every pregnant woman who visits prenatal care about the choice of doing an ultrasound examination so that pregnant women understand the benefits of ultrasound examination.

Keywords: pregnant woman, Pregnancy test, USG

BACKGROUND

Ultrasonography (USG) is a part of Ante Natal Care (ANC) to determine the condition of the fetus in the body. (Lady Tioro Coilal, 2020) Gynecological examination with ultrasound is a standard examination that is not mandatory, but with this examination, it is hoped that it can detect conditions that are at risk to the mother and fetus earlier (Sarwono Prawirohardjo, 2016). Pregnancy examination using ultrasound reported to have no harm effects on the fetus. nevertheful, research regarding safety issues and biological effects provided by usg continues to be conducted. Pregnancy examination with ultrasound should only be carried out by a competent doctor and there are certain medical indications. This is intended to maintain the safety of the fetus when using ultrasound(D"Addario, 2022).

At this time most pregnant women do an ultrasound examination only to find out the sex of the fetus. (RS Hermina Pekalongan, 2020) Factors that influence pregnant women to carry out ultrasound are basically motivation, both from themselves and from outside. External motivation comes from family support, such as attention from husbands and health workers who have the knowledge to encourage pregnant women to have their wombs checked (Lies Indarwati,

The results of the preliminary study conducted were obtained from 10 pregnant women who did an ultrasound examination, it was found that 6 people had less knowledge about ultrasound, 8 people did an examination based on a midwife's referral and 6 people did not get a husband's support. The large number of pregnant women who carry out ultrasound examinations based on midwife referrals and not of their own free will shows that the level of knowledge about ultrasound is still lacking.(Komariyah, 2019) Ultrasound performed at her own request is influenced by the intrinsic motivation of pregnant women to get examination results from the health of their fetus. Meanwhile, pregnant women do not get support from their husbands because their husbands argue that ultrasound can endanger the health of the fetus and require high costs. (Megawati Sinambela and Eva Solina, 2021)

METHOD

The research is a descriptive study that had an analytic survey using a cross-sectional design. To collect research data using a questionnaire sheet. The sample of this research uses 50 respondents. Respondents were pregnant women who were living in the Lerep Primary Health Care area in Semarang Regency, before filling out the questionnaire, the researcher has been explained that this research would be kept confidential, and the respondents had been explained the risks of this research and agreed to it by filling out an informed consent form.

RESULT

1. Knowledge Level

Frequency distribution of knowledge level of respondents who chose to have their pregnancy checked using ultrasound at the Lerep Primary Health Care. Semarang Regency

No	Knowledge	Frequency	Prosentage (%)
1	Less	28	56
2	Well	22	44
	Total	50	100

In this table, it can be seen that the majority of pregnant women are less knowledgeable as many as 28 people or 56%.

2. Parity

Frequency distribution of parity of respondents who chose to have their pregnancy checked using ultrasound at the Lerep Primary Health Care, Semarang Regency

No	Paritas	Frequency	Prosentage
1.	Primiparas	31	62
2	Multyparas	19	38
	Total	50	100

In this table, it can be seen that the majority of pregnant women are primiparas, namely as many as 31 respondents (62%).

3. Motivation

Frequency distribution of motivation level of respondents who chose to have their pregnancy checked using ultrasound at the Lerep Primary Health Care, Semarang Regency

No	Motivation	Frequency	Percentage	_
1	Low Level	28	56	
2	High Level	22	44	
	Total	50	100	

In this table, it can be seen that the majority of pregnant women are in low levels of motivation as many as 28 people or 56%.

4. Husband Supports

Frequency distribution of husband supports of respondents who chose to have their pregnancy checked using ultrasound at the Lerep Primary Health Care, Semarang Regency

No	Husband Supports	Frequency	Percentage
1	Doesn't Support	28	56
2	Support	22	44
	Total	50	100

In this table, it can be seen that the majority of pregnant women are in low levels of motivation as many as 28 people or 56%.

5. The Ultrasound Examination Selection By Pregnant Women

Frequency distribution of Ultrasound Examination Selection at the Lerep Primary Health Care, Semarang Regency

		rregency		
No	Examination selection	Frekuensi	Prosentase	
1	Not according to recommendations	28	56	
2	According to recommendations	22	44	
	Total	50	100	

From this table the majority of respondents checked their pregnancies using ultrasound not in accordance with the recommendations, namely 28 people (56%)

6. The correlation between knowledge and USG examination selections

The correlation between knowledge and USG examination selections in Lerep Primary Health Care, Semarang Regency

				regency				
Knowledge	USG examination selections				٦	Total	P value	
	Not accord	•	According recommen	to dations				
	n	%	n	%	N	%	0.001	
Less	22	15,7	6	12,3	28	28		
Well	6	12,3	16	9,7	22	22		
Total	28	28	22	22	50	100		

The statistical test results obtained p value = $0.001 \le 0.05$ which means that there is a significant relationship between the knowledge of pregnant women and the choice of ultrasound examination at the Lerep Health Center, Semarang Regency.

7. The correlation between Parity and USG examination selections

The correlation between Parity and USG examination selections in Lerep Primary Health Care, Semarang Regency

Parity	US	USG examination selections			٦	Total	P value
	Not accor	•	According recommer				
	n	%	n	%	N	%	0.209
Primiparas	20	17,4	11	13,6	31	28	
Multyparas	8	10,6	11	8,4	19	22	
Total	28	28	22	22	50	100	

The statistical test results obtained a p value of $0.209 \ge 0.05$, which means that there is no significant relationship between the parity of pregnant women and the choice of ultrasound examination at the Lerep Health Center, Semarang Regency.

8. The correlation between Motivation and USG examination selections

The correlation between Motivations and USG examination selections in Lerep Primary Health Care, Semarang

		Regency								
Motivations	USG	USG examination selections					P Value			
	Not according to recommendations		According recommendations	to						
	n	%	n	%	N	%				
Low Level	15	12,3	7	9,7	22	22	0,211			
High Level	13	15,7	15	12,3	28	28				
Total	28	28	22	22	50	100				

The statistical test results obtained a p value of $0.211 \ge 0.05$ which means that there is no significant relationship between the motivation of pregnant women and the choice of ultrasound examination at the Lerep Health Center, Semarang Regency.

9. The correlation between Husband Support and USG examination selections

The correlation between Husband Supports and USG examination selections in Lerep Primary Health Care, Semarang Regency

Husband supports	USG examination selections					tal	P Value	POR
	Not according	g to	According	to				
	recommenda	ations	recommendat	tions				
	n	%	n	%	Ν	%		
Doesn't	20	15,7	8	12,3	28	28	0,028	4,375
Support								
Support	8	12,3	14	9,7	22	22		
Total	28	28	22	22	50	100		

The statistical test results showed that the p value was $0.028 \le 0.05$, which means that there is a significant relationship between husband's support and the choice of ultrasound examination at the Lerep Health Center, Semarang Regency. Analysis of the description of the 2 variables obtained prevalence or POR (95% CI: (1.325-14.446) can be interpreted that respondents with non-supportive husbands are at risk of 4.375 times getting an ultrasound examination that does not match the recommendations compared to husbands who support it.

DISCUSSION

The correlation between knowledge and USG examination selections

After the statistical test, the p value was $0.001 \le (0.05)$, which means that there is a significant relationship between the knowledge of pregnant women and the choice of ultrasound examination at the Lerep Ungaran Health Center. Of the 28 respondents who had good knowledge, there were 6 people (12.3%) with the category of choosing an ultrasound examination that did not match the recommendations.

According to the assumptions of researchers, respondents with less knowledgeable categories are related to exposure to information about the importance. Respondents with less knowledge consider that ultrasound is not important in determining pregnancy health, in contrast to respondents with good knowledge, this is because these respondents have obtained many sources of information about the importance of selecting ultrasound examinations in pregnancy because respondents think this determines health in pregnancy. Knowledge of a person is also inseparable from the education pursued by the person. Someone who has a higher education, the ability to know, understand and understand someone will be easier (Prof.Dr. Soekidjo Notoatmodjo. S.K.M., 2014). Thus it can be said that there is a tendency that the better a person's knowledge, the better the awareness of the importance of having their pregnancy checked using ultrasound. This is in accordance with research conducted by (Akbar Andika reza, 2017) which states that there is a relationship between the level of knowledge of pregnant women about ultrasound in pregnancy examinations and the use of ultrasound at the Padang Bulan Health Center, Medan based on a p value of 0.001.

2. The correlation between Parity and USG examination selections

The statistical test results obtained a p value of $0.209 \ge 0.05$ which means that there is no significant relationship between the parity of pregnant women and the choice of ultrasound examination at the Lerep Health Center, Semarang Regency.

According to the researchers' assumption, primiparous mothers who are pregnant for the first time have the motivation to check their pregnancy with health workers. On the other hand, mothers who have had more than one child have the notion that mothers have experience, so they rarely have their pregnancies checked, so pregnant women think that prenatal care, especially ultrasound, is not so important.(Resdeli Lubis, 2021) Mothers with primiparous pregnancies are more selective about pregnancy checks than multiparous pregnant women, they tend to delay pregnancy checks and are less likely to keep prenatal check-up appointments, especially if the mother's previous pregnancy experienced a few problems(Reeder, 2011)

The results of this study are in line with Junga's study (Ministi Ratri Junga, 2017) which stated that there was a relationship between maternal parity and ultrasound examinations at Ranotama Weru Manado Hospital, which showed that mothers with high parity did a lot of irregular ultrasound examinations. While in reality multipara parity has a higher risk of maternal mortality. Even though the actual risk of multipara parity can be anticipated with family planning, because most pregnancies at high parity are not prepared or planned(Padila, 2014)

3. The correlation between Motivation and USG examination selections

The statistical test results obtained a p value of $0.211 \ge$ of 0.05, which means that there is no significant relationship between the motivation of pregnant women and the choice of ultrasound examination at the Lerep Health Center, Semarang Regency.

According to Asnawi (Asnawi, 2002) one of the factors that influence motivation is family support. Pregnant women who ask to have their pregnancies checked using ultrasound based on family support can be influenced by external

encouragement, namely due to respect and respect for parents by being patient and wise about their pregnancy behavior. One of the factors that influence motivation is the factor of health facilities which is the health workers. Health workers are people who are educated, have knowledge about health and understand about the treatment that must be done to pregnant women in maintaining their health and have the authority to carry out pregnancy examinations.

According to research conducted by Lies Indrawati in 2010(Lies Indarwati, 2010) pregnancy checks using ultrasound in order to form good/positive motivation and action. Based on the results of the study, the majority of respondents had positive motivation of 38 (61.3%) and negative motivation of 24 (38.7%) and based on the results of the study there was a relationship between pregnant women's motivation and ultrasound pregnancy examinations at the Salatiga BPRSUD Obstetrics Polyclinic. can be seen from the P value = 0.001.

4. The correlation between Husband Support and USG examination selections

The statistical test results obtained a P value of $0.028 \le of (0.05)$ which means that there is a significant relationship between husband's support and the choice of ultrasound examination at the Lerep Health Center, Semarang Regency. According to the researcher's assumption that husbands do not support the choice of ultrasound examination due to the high cost of using ultrasound examinations, most husbands consider ultrasound examinations to be not very important, this is also related to the lack of ultrasound information. This is in contrast to husbands who support ultrasound pregnancy examinations, husbands who receive a lot of information about the benefits of ultrasound are more enthusiastic about the examination so that the wife's pregnancy is healthier and runs normally.

Pregnant women who do not get support from their husbands during pregnancy can experience stress or depression because everything related to pregnancy and the selection of examinations, including determining the selection of pregnancy support examinations such as ultrasound or those related to their pregnancy, is borne by them (Rustam Mochtar, 2015).

Factors from the support of husbands of pregnant women who ask to have their pregnancies checked using ultrasound based on family support can be influenced by external encouragement, namely because of respect and respect for parents by being patient and wise about their pregnancy behavior. Because there is support from the family for pregnant women to check their pregnancies so as to encourage mothers to routinely maintain their health, pregnancy and prevent complications, pregnant women request an ultrasound examination because of family support. This is in line with the research conducted by Lies Indriawati which stated that there was a relationship between husband and family in having their pregnancy checked using ultrasound at the Gynecology Polyclinic BPRSUD Salatiga in 2010 with a statistical test result of P Value 0.004.

CONCLUSION

There is a relationship between the knowledge and also between husband's support of pregnant women and the choice of ultrasound examination at the Lerep Health Center, Semarang Regency. But there is no relationship between the parity and the motivation of pregnant women and the choice of ultrasound examination at the Lerep Health Center, Semarang Regency. For the health workers at the Lerep Ungaran Health Center It is necessary to increase the provision of information and education about ultrasound examination services and information about ultrasound to pregnant women so that pregnant women know the benefits and uses of ultrasound examination. And for the researchers in further research needs to be carried out by paying attention to variables that can affect the motivation of pregnant women to ask for an ultrasound examination while the number of samples in future studies should be larger and not only use quantitative methods but also qualitative methods (interviews) and observation to see the motivation of pregnant women request an ultrasound examination. Also for pregnant women who check their pregnancies at the Lerep Ungaran Health Center It should be a consideration in requesting an examination using ultrasound because you have to know the benefits and for what indications in the examination using the ultrasound. For pregnant women, ultrasound examinations can be done at least 3 times during pregnancy or if there are indications and recommendations from the doctor or midwife who examines them.

REFERENCES

Akbar Andika reza (2017) 'Hubungan Tingkat Pengetahuan Ibu Hamil Tentang Ultrasonografi dalam Pemeriksaan Kehamilan dengan Pemanfaatan Ultrasonografi di Puskesmas Padang Bulan Medan', *Repository USU* [Preprint].

Asnawi (2002) Teori Motivasi Dalam Psikologi Industri dan Organisas. Jakarta.

D"Addario (2022) Donalds School Basic Textbook of Ultrasound in Obstetrics and Gynecology.

Komariyah (2019) Hubungan antara Dukungan Keluarga dengan Kepatuhan Ibu Hamil Dalam Pemeriksaan ANC.

- Lady Tioro Coilal (2020) 'Gambaran Tingkat Pengetahuan Ibu Hamil tentang Manfaat USG dalam Pemeriksaan Kehamilan', *Binawan Student Journal*, 2.
- Lies Indarwati (2010) 'FAKTOR-FAKTOR YANG MEMPENGARUHI MOTIVASI IBU HAMIL UNTUK MEMERIKSAKAN KEHAMILANNYA DENGAN MENGGUNAKAN USG DI POLIKLINIK KANDUNGAN BPRSUD SALATIGA TAHUN 2008', *kebidanan*, 2, pp. 52–60.
- Megawati Sinambela and Eva Solina (2021) 'Analisis Faktor Faktor Yang Mempengaruhi Ibu Hamil Terhadap Pemeriksaan Antenatal Care (ANC) Selama Pandemi COVID-19 Di Puskesmas Talun Kenas Tahun 2020', *Jurnal Kebidanan Kestra*, 3(2), pp. 128–135.
- Ministi Ratri Junga (2017) 'Faktor-Faktor yang Berhubungan dengan Keteraturan Pemeriksaan ANC pada Ibu Hamil Trimester III di Puskesmas Ranotana Weru Kota Manado', *Journal Keperawatan*, 5.
- Padila (2014) Buku Ajar Keperawatan Maternitas. Yogyakarta.
- Prof.Dr. Soekidjo Notoatmodjo. S.K.M., M.C.H. (2014) Ilmu Perilaku Kesehatan. Jakarta: Rineka Cipta: Jakarta.
- Reeder, S.J. (2011) Keperawatan maternitas: Kesehatan wanita, bayi & keluarga edisi 18.
- Resdeli Lubis (2021) 'Faktor-Faktor yang Mempengaruhi Motivasi Ibu Hamil untuk Melakukan Pemeriksaan USG Kehamilan di Poliklinik Kandungan dan Kebidanan RSUD Kabupaten Kepulauan Meranti', *Jurnal Ilmu Kebidanan* [Preprint].
- RS Hermina Pekalongan (2020) *Pentingnya USG saat Hamil*. Available at: https://www.herminahospitals.com/id/articles/pentingnya-usg-saat-hamil.
- Rustam Mochtar (2015) Sinopsis Obstetri: Obstetri Fisiologi Obstetri Patologi Edisi 3 Jilid 1. Jakarta: EGC.
- Sarwono Prawirohardjo (2016) Ilmu Kebidanan. Edisi keem. Jakarta: PT. Bina Pustaka Sarwono Prawirohardjo.