THE INFLUENCE OF EDUCATION, AGE AND INFORMATION SOURCES ON PREGNANT WOMEN'S KNOWLEDGE ABOUT EARLY DETECTION OF IMMINENT ABORT AT THE HOSPITAL MIDWIFERY POLYCLINIC BHAYANGKARA BRIMOB 2023

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Abstract

Background: Based on data on the number of abortions at Bhayangkara Brimob Hospital in the last 3 years, namely in 2020 there were 13 patients, in 2021 there were 21 patients and in 2022 there were 41 patients. From this data, it was found that the cause of the increase in abortion rates was due to mothers' lack of knowledge regarding early detection of imminent abortion. Research Objectives: To determine the influence of education, age and sources of information on pregnant women's knowledge about early detection of imminent abortion at the Obstetrics Polyclinic at Bhayangkara Brimob Hospital in 2023 Research Method: The research method used in this research is quantitative methods. This research includes cross sectional data. The population in this study was 40 pregnant women in the first trimester. The sample in this study was 40 respondents. The sampling technique is total sampling. Researchers used the chi-square test with a confidence level of 95% and a significance level of 5% respectively. Research Results: The results of the research show that the knowledge picture is good, namely 57.5%, the age of pregnant women is more 20 - 35 years old, namely 65%, the education of pregnant women is more secondary education, namely 65%, and the sources of information are more good sources of information. namely 55%. Statistical test results of education on knowledge P value = 0.007, age on knowledge P value = 0.015 and sources of information on knowledge P value = 0.000. Conclusions and Suggestions: There is an influence of education, age and sources of information on pregnant women's knowledge about early detection of imminens abortion at the Obstetrics Polyclinic of Bhayangkara Brimob Hospital in 2023. Suggestions for Hospitals Create educational classes for patients, especially pregnant women, to be able to understand about early detection incidence of imminent abortion

Keywords: Age, Abortion Imminens, Education, Knowledge, Sources of Information

Introduction

The International Association of Obstetrics and Gynecology explains that pregnancy can be defined as fertilization or the union of sperm and egg followed by attachment of the uterine wall or implantation. If calculated from conception to birth of the child, a normal pregnancy lasts 40 weeks or 10 months or 9 months according to the international calendar. Therefore, pregnancy is also divided into three trimesters, where the first trimester lasts from conception to three months (0-12 weeks), the second trimester starts from the fourth month to the sixth month (13-28 weeks), the third trimester starts from the fourth month to sixth month (13-28 weeks), third trimester starts from seven to nine months (29-42 weeks) (Nuryaningsih, 2017).

To find out what is happening in pregnancy, you can start by knowing the signs and symptoms,

such as possible signs of pregnancy, signs that there is no definite pregnancy and definite signs of pregnancy. Signs of possible pregnancy at this time include changes in the uterus, Piskacek's sign, increased basal temperature, changes in the cervix, enlargement of the abdomen, tension of the uterus and checking biological tests. And signs of uncertain pregnancy include amenorrhea (late menstruation), nausea and vomiting, breast pain, movement of the baby in the womb, increased frequency of urination, constipation, changes in body weight, changes in skin color and breast size, wanting certain foods or drinks (cravings), frequent fainting, getting tired easily and the presence of varicose veins in the external genitalia, feet and calves (Nuryaningsih, 2017).

Meanwhile, some sure signs of pregnancy include starting to hear the fetal heartbeat, visible and palpable fetal movements in the uterus, visible parts of the fetus during an ultrasound examination (Nurhayati, 2019). Every pregnancy and its development carries the risk of causing complications that can harm the mother and fetus. In this case complications and complications can be prevented by early examination which allows identification and treatment of high risks during pregnancy (Febriyanti, Suryati and Astuti, 2023).

Early detection of complications/pathologies that occur in pregnancy through screening or early detection, including an explanation of the health history in the form of questions and answers, health examinations and support is needed to identify pregnancy risks. with a blood test. In addition, symptoms of complications such as miscarriage can occur due to uterine contractions (with or without suprapubic pain) and vaginal bleeding in premature pregnancy (Qudriani and Hudah, 2017).

Miscarriage/abortion is a condition that can threaten or expel the results of fertilization before the fetus has time to live outside the womb before the age of 20 weeks or the fetus weighs less than 500 grams. Miscarriage/abortion is divided into two types, namely spontaneous (natural) abortion and planned (intentional) abortion (Nurhayati, 2019).

Abortion can be caused by several factors, one of which is maternal factors, namely maternal age, parity, gestational age, education, employment, marital status, financial status, various diseases, maternal nutritional status and history of abortion. In cases of miscarriage, discharge or brown spots from the vagina before the gestational age is less than 20 weeks or with a fetus weighing less than 500 grams is a characteristic feature. Complications that commonly occur in early pregnancy are the risk of miscarriage which is characterized by uterine bleeding before 20 weeks of gestation, and contractions, where the fertilization products are still intact in the uterus and the ostium is closed (Prawirohardjo, 2018).

If abortion is detected, physical and laboratory examinations such as pelvic examination, ultrasound and blood tests must be carried out to determine abnormalities that affect the course of pregnancy. Iron deficiency can also cause disruption or obstacles to the development of pregnancy in pregnant women, women, fetuses, body cells and cell growth. If there is a risk of miscarriage which could lead to incomplete abortion, treatment and monitoring is needed to control bleeding. This is because bleeding that does not heal quickly and completely endangers the safety of pregnant women due to hypovolemic shock (Nurbaiti et all., 2019).

For every 100,000 cases of unsafe abortion, around 30 women die in developed countries and meanwhile the death rate in developing countries increases to 220 deaths per 100,000 unsafe abortions so that there are 4.7 to 13.2 percent experiencing abortion (World Health Organization) (2020). According to Indonesian Health Profile Data and Information (2019), the number of abortions in Indonesia was 1,280 pregnant women. The above figures occur most often in the provinces of West Java and East Java, namely 16% and 12%. In mothers who have had an abortion.

Based on data on the number of abortions at Bhayangkara Brimob Hospital in the last 3 years, namely in 2020 there were 13 patients, in 2021 there were 21 patients and in 2022 there were 41 patients. From this data, it was found that the cause of the increase in abortion rates was due to mothers' lack of knowledge regarding early detection of imminent abortion. Several factors that

influence knowledge are divided into two, namely internal factors (age, gender) and external factors (education, work, experience, information sources, interests, environment and socio-culture) (Darsini, dkk, 2019).

Based on a preliminary study at the Bhayangkara Brimob Hospital, it is known from the results of interviews with 10 pregnant women that from the 5 questions asked regarding knowledge about early detection and the incidence of imminent abortion in pregnant women, it was found that 4 people (40%) with good knowledge, 3 people (30%) with sufficient knowledge, 3 people (30%) with insufficient knowledge. Regarding the maternal age of the 10 pregnant women, it was found that 2 were < 20 years old, 5 were 20-30 years old and 3 were > 30 years old. Regarding maternal education, it is known that out of 10 pregnant women, 6 have high school education and 4 have college education. Regarding sources of information, it is known that 5 people got their information from the media, one of which was the internet and 5 other people based information from non-media such as doctors, midwives, parents, friends, etc.

From the description above, the author is interested in researching "The influence of education, age and sources of information on pregnant women's knowledge about early detection of imminent abortion in the Midwifery Polyclinic at Bhayangkara Brimob Hospital in 2023"

Methods

Research design

The research design uses quantitative methods and a cross sectional approach. The quantitative method is a method based on the philosophy of positivism which aims to describe and test a hypothesis made by the researcher (Sugiyono, 2018). Based on its objectives, this research is included in descriptive research. Descriptive research according to (Sugiyono, 2018) is research used to answer problem formulations related to questions on one or more variables to determine the effectiveness of each program evaluation component. So in this study the researcher looked for the relationship between one variable and another variable. Based on the type of research, this research is considered causal or cause and effect (Sugiyono, 2018).

Population and Sample

The population in this study was 40 pregnant women in the first trimester. The sample in this study was 40 respondents with a sampling technique, namely total sampling, which is a sampling technique where the number of samples is the same as the population

Research Instrument

The instrument in this research was to use a questionnaire. The questionnaires in this research are knowledge, age, education and sources of information.

Data analysis

The research uses univariate analysis to describe each variable studied. Researchers used the Chi Square test with a confidence level of 95% or a significance level of 5%.

Result

Table 1 Description of Pregnant Women's Knowledge Regarding Early Detection of Imminent Abortion at the Obstetrics Polyclinic of Bhayangkara Hospital Brimob in 2023

No	Knowledge	Frequency (f)	Percentage (%)
1.	Good	23	57,5
2.	Simply	14	35,0
3,	Less	3	7,5
	Total	40	100%

Based on table 1, it is known that the description of pregnant women's knowledge regarding early detection of imminent abortion at the Obstetrics Polyclinic of Bhayangkara Brimob Hospital in 2023 is that respondents have more good knowledge, namely 23 out of 40 respondents (57.5%).

Table 2 Description of the Age of Pregnant Women in the Midwifery Polyclinic of Bhayangkara Brimob Hospital in 2023

No	Age	Frequency (f)	Percentage (%)
1.	<20 and > 35 years	14	35,0
2.	20 – 35 years	26	65,0
	Total	40	100%

Based on table 2, it is known that the description of the age of pregnant women at the Midwifery Polyclinic of Bhayangkara Brimob Hospital in 2023 is that the majority of respondents are aged 20 - 35 years, namely 26 out of 40 respondents (65%).

Table 3 Description of Pregnant Women's Education at the Midwifery Polyclinic of Bhayangkara Brimob Hospital in 2023

No	Education	Frequency (f)	Percentage (%)
1.	Basic	0	0
2.	Intermediate	30	75,0
3	High	10	25,0
	Total	40	100%

Based on table 3, it is known that the description of the education of pregnant women at the Midwifery Polyclinic of Bhayangkara Brimob Hospital in 2023 shows that the majority of respondents had secondary education, namely 30 out of 40 respondents (65%).

Table 4: Description of sources of information for pregnant women regarding early detection of immediate abortion at the Obstetrics Polyclinic at Bhayangkara Hospital Brimob in 2023

No	Source of information	Frequency (f)	Percentage (%)
1.	Good	22	55,0
2.	Poor	18	45,0
	Total	40	100%

Based on table 4, it is known that the description of sources of information for pregnant women regarding early detection of imminent abortion at the Obstetrics Polyclinic of Bhayangkara Brimob Hospital in 2023 is that respondents had more good sources of information, namely 22 out of 40 respondents (55%).

Table 5: The Influence of Education on Pregnant Women's Knowledge About Early Detection of Imminent Abortion at the Obstetrics Polyclinic at Bhayangkara Brimob Hospital in 2023

Education	Knowledge						Total		P value
	Good		Fair		Poor				
	f	%	f	%	f	%	f	%	
Intermediate	13	43,3	14	46,7	3	10	30	100	0,007
Height	10	100	0	0	0	0	10	100	
Total	23	57,5	14	35,0	3	7,5	40	100	

Based on table 5, it is found that the influence of education on pregnant women's knowledge regarding early detection of imminent abortion at the Obstetrics Polyclinic of Bhayangkara Brimob Hospital in 2023 shows that secondary education is more likely to have sufficient knowledge, namely 14 out of 30 respondents (46.7%) while higher education is more common. those with good knowledge were 10 out of 10 respondents (100%). The results of statistical tests obtained a P value = 0.007, meaning P value < ∝ (0.05), so it can be concluded that there is an influence of education on pregnant women's knowledge about early detection of imminent abortion at the Bhayangkara Brimob Hospital Midwifery Polyclinic in 2023.

Table 6: Effect of Age on Pregnant Women's Knowledge About Early Detection of Imminent Abortion at the Obstetrics Polyclinic at Bhayangkara Hospital Brimob in 2023

Age	Knowledge						Total		P value
	Good		Fair		Poor				
	f	%	f	%	f	%	f	%	
<20 and > 35 years	4	28,6	9	64,3	1	7,1	14	100	0,015
20 – 35 years	19	73,1	5	19,2	2	7,7	26	100	
Total	23	57,5	14	35,0	3	7,5	40	100	

Based on table 6, it is found that the influence of age on the knowledge of pregnant women regarding early detection of imminent abortion at the Obstetrics Polyclinic of Bhayangkara Brimob Hospital in 2023 shows that those aged < 20 and > 35 years are more likely to have sufficient knowledge, namely 9 out of 14 respondents (64.3%) while those aged 20 – 35 years had more good knowledge, namely 19 out of 26 respondents (73.1%). The results of statistical tests obtained a P value = 0.015, meaning P value < ∝ (0.05), so it can be concluded that there is an influence of age on pregnant women's knowledge about early detection of imminent abortion at the Bhayangkara Brimob Hospital Midwifery Polyclinic in 2023.

Table 7: The Influence of Information Sources on Pregnant Women's Knowledge About Early Detection of Imminent Abortion at the Obstetrics Polyclinic at Bhayangkara Brimob Hospital in 2023

Source of Information	Pengetahuan						Total		P value
	Good		Fair		Poor				
	f	%	f	%	f	%	f	%	
Good	19	86,4	2	9,1	1	4,5	22	100	0,000
Poor	4	22,2	12	66,7	2	11,1	18	100	
Total	23	57,5	14	35,0	3	7,5	40	100	

Based on table 7, it is found that the influence of information sources on pregnant women's knowledge about early detection of imminens abortion at the Obstetrics Polyclinic of Bhayangkara Brimob Hospital in 2023 shows that the source of good information is more likely to have good knowledge, namely 19 out of 22 respondents (86.4%) while the source of information is less good, more had sufficient knowledge, namely 12 out of 18 respondents (66.7%). The statistical test results showed that the P value = 0.000, meaning the P value < ∝ (0.05), so it can be concluded that there is an influence of the source of information on pregnant women's knowledge about early detection of imminent abortion at the Bhayangkara Brimob Hospital Midwifery Polyclinic in 2023.

Discussion

The Influence of Education on Pregnant Women's Knowledge About Early Detection of Imminent Abortion at the Obstetrics Polyclinic at Bhayangkara Hospital Brimob in 2023

Based on the research results, it was found that secondary education had more sufficient knowledge, namely 14 out of 30 respondents (46.7%) while higher education had more good knowledge, namely 10 out of 10 respondents (100%). The statistical test results obtained a P value = 0.007, meaning P value < ∝ (0.05), so it can be concluded that there is an influence of education on pregnant women's knowledge about early detection of imminent abortion at the Bhayangkara Brimob Hospital Midwifery Polyclinic in 2023.

In line with Dahlan's research in 2017, it is known that the Chi-square statistical test results obtained an X table value of: 3,861 a 2 count: 17,646 or P value = 0.00 < a value = 0.05. This means that Ha is accepted, namely that there is a relationship between education and the knowledge of primigravida pregnant women in recognizing the danger signs of pregnancy.

In theory, education is guidance and assistance provided by adults to help children grow into adults, and the aim is to ensure that children are fully able to face life's challenges independently without the help of others. According to Lestari (2016) in Wirawan, educational level is "the activity of an individual who develops skills, attitudes and forms of behavior for his future life, through a particular organization or unorganized. The definition of education which means preservation, development, advancement, and so on is a translation of the word Murabbi which comes from the basic word Rabb. Other terms that are commonly used are mualim and muad'ib, where the word mu'alim is similar to the meaning of teacher or leader, and the word muad'ib is similar to the meaning of character development (Sulaiman Saat, 2015). Feni in Kosilah & Septian (2020,1139) "Education is guidance and assistance provided by adults to help children grow into adults, and the aim is to ensure that children are fully able to face life's challenges independently without the help of others. According to Lestari (2016) in Wirawan, the level of education is "the activities of an individual who develops skills, attitudes and forms of behavior for his future life, through a particular organization or unorganized".

According to the researcher's assumption, a person's high level of education influences the management of materials that are managed according to their aims and objectives. The level of education influences behavior and brings many changes, including knowledge in the health sector. Educated women find it easier to access professional services than less educated women because they are more aware of the benefits of health services.

The Influence of Age on Pregnant Women's Knowledge About Early Detection of Imminent Abortion in Pregnant Women at the Obstetrics Polyclinic at Bhayangkara Brimob Hospital in 2023

Based on the research results, it was found that those aged < 20 and > 35 years were more likely to have sufficient knowledge, namely 9 out of 14 respondents (64.3%) while those aged 20 - 35 years were more likely to have good knowledge, namely 19 out of 26 respondents (73.1 %). The statistical test results showed that the P value = 0.015 means P value < ∝ (0.05) so it can be concluded that there is an influence of age on knowledge about early detection and the incidence of IMMINENT abortion in pregnant women at the Midwifery Polyclinic of Bhayangkara Brimob Hospital in 2023

In line with Dahlan's 2017 research, it is known that the Chi-square statistical test results are P = 0.00 < a value = 0.05. This means that Ha is accepted, namely that there is a relationship between age and the knowledge of primigravida pregnant women in recognizing the danger signs of pregnancy at the Mungkajang Community Health Center, Palopo City.

According to the theory, maternal age is related to female genitalia. A healthy and safe reproductive age is 20-35 years. Age over 35 years is accompanied by decreased strength and endurance, and various diseases often occur at that age. The age that probably does not have a high risk during pregnancy and childbirth is 20-35 years, because at this age the uterus is ready for pregnancy, is mentally mature and can take care of the child and itself. At the same time, people under 20 years old or over 35 years old have a high risk of pregnancy and childbirth. Thus, it is known that age at birth also influences maternal and child morbidity and mortality rates(Ermiati and Widiasih, 2018).

According to researchers' assumptions, changes occur in psychological and mental (spiritual) aspects as a person ages. Broadly speaking, four groups of changes in physical growth are distinguished, namely changes in size, proportional changes, loss of old characteristics, and the emergence of new characteristics. This is caused by the maturing function of the body's organs. Psychologically and spiritually, the level of human thinking is becoming more mature and mature. At certain ages, for example in old age, the ability to receive or remember information decreases.

The Influence of Information Sources on Pregnant Women's Knowledge About Early Detection of Imminent Abortion at the Obstetrics Polyclinic at Bhayangkara Hospital Mobile Brigade in 2023

Based on the research results, it was found that the sources of good information were more likely to have good knowledge, namely 19 out of 22 respondents (86.4%), while the sources of less good information were more likely to have sufficient knowledge, namely 12 out of 18 respondents (66.7%). The statistical test results showed that the P value = 0.000 means P value < ∝ (0.05) so it can be concluded that there is an influence of the source of information on pregnant women's knowledge about early detection of abortion cases at the Bhayangkara Brimob Hospital Midwifery Polyclinic in 2023

In line with Dahlan's 2017 research, it is known that the P value = 0.00 < a value = 0.05. This means that Ha is accepted, namely that there is a relationship between exposure and knowledge of primigravida pregnant women in recognizing the danger signs of pregnancy at the Mungkajang Community Health Center, Palopo City.

According to theory, an information source is anything that becomes an intermediary for the delivery of information, a carrier of mass communication. Sources of information can be obtained through print media (newspapers, magazines), electronic media (television, radio, internet) and health worker activities such as training held (Notoatmodjo, 2018)

According to researchers' assumptions, ease of obtaining information can accelerate the acquisition of new information. The more information a person receives, the better his knowledge will

be. It is said that someone is exposed to good information if he always receives good information through other people or other media such as newspapers, television, banners, radio, etc.

Obstacles or barriers for pregnant women to get good information about the threat of abortion are that mothers do not try or lack motivation to seek information about the threat of abortion, and pregnant women feel that information about the threat of abortion is taboo. they are afraid that this will happen to themselves. In hospitals there is also no learning for patients, especially pregnant women, to understand early detection of abortion, and there are no posters or leaflets regarding awareness of early detection of the threat of abortion. In addition, nurses do not teach awareness of early detection of abortion threats.

There are also factors that support good information about immediate abortion, namely the easy availability of information obtained, for example via the internet on cell phones, which can easily and at any time access a large amount of information about immediate abortion.

Implication and Limitations

Respondents fill out the questionnaire themselves so there could be information bias, the results of the respondent's answers depend on the respondent's honesty. Questionnaires with closed questions so that they cannot explore information in depth

Conclusions and recommendations

Based on the results of the research and discussion presented by the researcher, the following conclusions can be drawn: The frequency distribution of pregnant women's knowledge about early detection of imminent abortion at the Bhayangkara Brimob Hospital Midwifery Polyclinic in 2023 is that respondents have more good knowledge, more people aged 20 - 35 years, more secondary education and more sources of good information. There is an influence of education on pregnant women's knowledge about early detection of imminens abortion at the Obstetrics Polyclinic of Bhayangkara Brimob Hospital in 2023 with a P value = 0.007. There is an influence of age on pregnant women's knowledge about early detection of imminent abortion at the Obstetrics Polyclinic of Bhayangkara Brimob Hospital in 2023 with a P value = 0.015. There is an influence of information sources on pregnant women's knowledge about early detection of imminens abortion at the Obstetrics Polyclinic of Bhayangkara Brimob Hospital in 2023 with a P value = 0.000.

Suggestions for Hospitals Create training courses for patients, especially pregnant women, to understand early detection of the threat of imminent abortion. Make posters or brochures related to early detection of the threat of imminent abortion

Author Contribution

Author 1 and Author 2 contributed to the design and implementation of the research, to the analysis of the results and to the writing of the manuscript.

Conflict of interest

The results of this research can be used as an additional literature for the development of nursing science, and to meet the requirements of obtaining Bachelor of Nursing Degree

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