RESEARCH ARTICLE
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Women of Childbearing Age in Healthy Village Makassar City: Health Belief Model Approach

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ABSTRACT

An unwanted pregnancy is the effect of stopping use of contraception, which can lead to unsafe abortion and maternal death. This study aims to analyze the determinants of pregnancy intentions in women of childbearing age in Pai healthy village of Makassar. The research used quantitative cross sectional study design. The research sample consisted of 170 women of childbearing age who were selected using a purposive sampling technique. Data were analyzed using the chi square test, and multiple logistic regressions. The results showed that there was an influence of age, husband's support, health worker support, threat perception, perceived suseptibility, perceived benefits, and perceived barriers to pregnancy intentions (p <0.05). The results of the analysis using multiple logistic regression showed the husband's support (p = 0.000; OR (95% CI) = 158.883 (26.944-936.897) was the most influential factor in the intention of becoming pregnant. The husband can work together with cadres, to maximize health education so that it can dispel myths about contraception.

Keywords: pregnant intention; health belief model; husband support; health officer support; healthy village

INTRODUCTION

Background

   The current status of maternal health in Indonesia is still far from what is expected, as indicated by the high maternal mortality rate. There are four components that cause maternal death, namely mothers who have many children, the age of mothers is too young, too old, and too close to birth spacing [1]. In addition, the high maternal mortality rate is inseparable from the high incidence of unwanted pregnancy which reaches 16.8%. A further consequence of unwanted pregnancy is unsafe abortion, and abortion itself contributes 49% to maternal mortality [2].

   Unwanted pregnancy is a serious health problem in both developed and developing countries [3]. Every year it is estimated around 80 million women which had unwanted pregnancy. In Indonesia the proportion of unwanted pregnancies reaches 77% [4]. Unwanted pregnancies include mistimed pregnancy and unwanted pregnancy [5]. Many factors because of unwanted pregnancy, but the most factors are the stop of using contraceptive use [3].

   Based on the Indonesian health profile report in 2016, the active family planning participants reached 74.80% and in 2017 it was 63.22%. In South Sulawesi, the coverage of active family planning participants in 2016 was 72.30% and in 2017 61.30%. The data above shows using contraceptive in women of childbearing age tends to decrease. Using contraception is influenced by several factors, according to Castle and Askew [6] side effects of contraception, rumors circulating, misinformation, intentions, and motivation affect women's decisions to stop using contraception. While research which conducted by Huda [7] states the variables which related by using contraceptive are maternal knowledge, mother's attitude, husband's support, and the role of

health workers. Research which conducted by Ezeanoule [8] and Balogun [9] states husband's support is the center of wife's compliance to use contraception, therefore husband's involvement is very influential.

Efforts in improving family planning services can be assessed in HBM concept, research which conducted by Mohsen [10] states applying of the Health Belief Model has proven to be effective in changing health beliefs about birth spacing. HBM can predict a person to take action in preventing an unwanted pregnancy based on an individual's perception [11]. Individual perceptions / mother perceptions include perceptions of threats to unwanted pregnancies, perceptions of suseptibility to unwanted pregnancies, perceived benefits from contraceptive use, and perceptions of barriers to contraceptive use. besides examining aspects of the individual / mother, HBM also explained the aspects of cuss to action and also enabling factors such as age, husband's support, support of health workers give effect.

The big impact caused by the cessation of the stop of using of family planning (KB) on maternal mortality, therefore the efforts is needed to increase the reception of contraceptive services. Therefore, the Family Planning Population Board (BKKBN) must strengthen the family planning program by initiating a healthy village program that called "Kampung KB". Healthy village is the idea of President Jokowi which is one form / miniature model of the total implementation of the KKBPK (Family Planning and Family Development) program as a whole that involves all fields in the BKKBN environment and synergizes with ministries / institutions, working partners, relevant agency stakeholders in accordance with the needs and conditions of the region, and implemented at the lowest level of government (according to the prerequisites for determining the location of the family planning village) in all districts and cities [4].

Indicators of success from the healthy villages are based on the average achievements in each region. In family planning and reproductive health, one of the indicators is the achievements of family planning participants. In South Sulawesi region, the achievement of family planning is determined by the number of requests for community specialization (PPM). Based on the results of the F / I / DAL / 13 in Makassar City, the achievements of KB participants on PPM, in December 2017 the achievements of KB participants in all districts of Makassar City have reached 100%. But in December 2018 there were 8 subdistricts whose KB participants had decreased, including the Sangkarrang sub-district 92.61%, Manggala 87.10%, Biringkanaya 83.38%, Panakukang 90.12%, Ujung Tanah 96.03%, and Tallo 90.23. Based on these data, it can be seen the achievements of KB participants whose percentage decreased significantly were found in the Biringkanaya sub-district which was 83.38% [12]. Biringkanaya sub-district was one of the sub-districts that had a KB village located in the Pai Village.

Decreasing the percentage of using contraceptive can cause unwanted pregnancies in married women of childbearing age, and it is driven by several factors, including: Individual factors, husband factors, as well as health workers, so this research is feasible to use the Health Belief Model approach. In this research will provide benefits for the improvement of aspects that affect pregnancy intentions.

Purpose

The aims ot this study is to analyze the factors that influence pregnancy intentions by using the health belief model approach in women of childbearing age in the Healthy village, Kota Pai, Makassar on 2019.

METHODS

Study Design and Setting

Study Design and Arrangement an observational study used a cross sectional design was carried out in the Healthy village in Kelurahan Pai in Makasssar City, South Sulawesi in May-June 2019.

Population and sample

The population in this study were all women of childbearing age who were married and living in the healthy village area of the Pai, City of Makassar, totaling 455 people. The sampling technique used a purposive sampling method that takes samples based on inclusion criteria set by researcher, the total sample is 170 women.

Data Collection

Data collection was obtained through secondary data from the Makassar Population and Family Planning Control Office. Primary data collected by interview using a questionnaire to get information about the variables to be analyzed in this study. The questionnaires was given to respondents were selected based on the register book in healthy village.

The variables of health belief model in this study were women's age, husband's support, support of health workers, and perception of threats, perception of susecptibility, perception of benefits, and perception of barriers.

Data Analyze

Data is processed through the process of editing, coding, and then it inputed into Microsoft Excel and SPSS Version 20 by using Bivariate and multivariate analysis. It used to know the effect of each independent variable on the dependent variable. Odd Ratio value is to measure the amount of influence between independent and dependent variables of confidence interval in 95%. The HBM variables included in multiple logistile regression test are variables that have p-values <0.25 from the results of bivariate analysis. The result of final model was tested by Hosmer and Lemeshow.

<center>RESULTS</center>

Component of health belief model and pregnancy intention

<center>Table 1. Effect of Health Belief Model's component and pregnancy intention</center>

| Health Belief Model | Pregnancy Intention | | | | P-value |
| | Unintended | | Intended | | |
	Frequency	%	Frequency	%	
Wooman's Age					0.000
-Risk	31	37.3	52	62.7	
-Not Risk	7	80	80	92	
Husband's Support					0.000
-Support	5	3.8	128	96.2	
-Doesn't support	33	89.2	4	10.8	
HealthWorker's Support					0.000
-Support	7	5.3	125	94.7	
-Doesn't support	31	81.6	7	18.4	
Perceived Threat					0.000
-Well	8	6.1	124	93.9	
-Less	30	78.9	8	21.1	
Perceived Suseptibility					0.000
-Well	11	7.9	129	92.1	
-Less	27	90	3	10	
Perceived Benefit					0.000
-Well	10	7.4	125	92.6	
-Less	28	80	7	20	
Perceived Barriers					0.000
-Low	14	10.2	123	89.8	
-High	24	72.7	9	27.3	
Total	132	77.6	38	22.4	

Table 1 shows the results of the bivariate statistical analysis based on the level of significance p <0.05 showed there was an influence on women's age (p = 0.000), husband's support (p = 0.000), support of health workers (p = 0.000), perceived threat (p = 0.000), perception of suseptibility (p = 0.000), perception of benefits (p = 0.000), and perception of barriers (p = 0.000) towards pregnancy intentions. Unwanted pregnancies are more common in women at risk which are 31 women (37.3%) than women who got husband's support are(8%). Unwanted pregnancies were most experienced by women who did not get husband support as many as 33 people (89.2%) compared to those who received support from her husband (3.8%). Unwanted pregnancies are most common in women who do not get support from health workers as many as 31 people (81.6%) compared to getting support (5.3%).

Table 1 also show more unwanted pregnancies occur in women who have less threat perception as many as 30 women (78.9%), perception of suseptibility is less is 27 women (90%), and perception of benefits is less is 28 (80%) than those with threat perception (6.1%), vulnerability perception (7.9%), and good perception of

benefits (7.4%). For barriers perception, the results show the more unwanted pregnancy is found in women who have a large barriers perception of 24 people (72.7%) than those who have a small barriers perception (10.2%).

Table 2. Logistic regression analysis of the Forward Wald regression method

Variabel	B	Nilai p	OR (95% CI)
Husband's support	5.068	0.000	158.883 (26.944-936.897)

Nagelkerke R^2 = 0.839
Hosmer and Lemeshow Test for Goodness of fit: nilai p Chi Square = 0.165 which means the data can explain the model.

The variables of health belief model included in the multivariate analysis were age, husband's support, support of health workers, perception of threats, perception of suseptibility, perception of benefits, and perception barriers that have a p-value <0.25. Logistic regression analysis using the Forward Wald method is used to see the variables that most influence pregnancy intentions. The logistic regression analysis showed the most influential variable was husband's support with an Odd Ratio (OR) of 158.883 (95% CI: 26.944-936.897) (table 3).

DISCUSSION

The results showed the components of the health belief model (women's age, husband's support, support of health workers, perceived threat, perceived suseptibility, perceived usefulness, and perceived barriers had a significant effect on pregnancy intentions in women of childbearing age in the Pai healthy village, Makassar City. Women who have an age at risk have a greater percentage of unwanted pregnancies (37.3%) than those who are not at risk (8%). unwanted pregnancies are experienced by many women aged 40-49 years, the high rate of unwanted pregnancies at this age due to the percentage decrease in contraceptive use. This is due to the perception that women who have entered menopause are less likely to experience pregnancy [13].

There were respondents who were at risk but had an unwanted pregnancy (4.1%). Research which conducted by Palamuleni et.al [14] and Finer [15] states women in aged 15-29 years are more likely to have an unwanted pregnancy than those aged > 30 years. The previous research explain that the more age, the more experience women's lives [16]. It encourages woman to had better understand the importance of preventing unwanted pregnancies by using contraception. Healthy village (kampung KB) is a newly established program since the last 2 years. Women of childbearing age who live in the Kb village in kelurahan Pai mostly have a marriage age of more than two years, which means there were many women of childbearing age have married before the healthy village program was formed.

Most respondents (89.2%) who had experienced in unwanted pregnancy were respondents who did not have the support of their husbands. Statistically, it shows there is an influence of husband's support on the intention to get pregnant in women of childbearing age (p = 0.000). According to Huda's research [7] husband's support is the center of women's decision to regulate birth spacing, most women who do not use contraception to control their pregnancy are in the group of women who lack support from their husbands. However, it had different result than the previous research. It shows there is no Significant effect between husband support for pregnancy intentions, because the husband's who have enough education (high school) is not enough to encourage the husband to provide support for pregnancy intentions [17]. There are respondents (3.8%) who despite getting support from her husband but still experiencing unwanted pregnancy. According to Pinamangun [18] husband's support is not only emotional support, but also financial support for using contraception is also needed. One of the essences of the healthy village is establishing there are eight family functions in applying of life. The husband is part of eight family functions and decision makers in the family,according to Anggraeni [19] the husband also needs to get the same information about family planning and reproductive health. An understanding of family planning, the husband will participate to prevent pregnancy by using contraception.

Unwanted pregnancies are mostly found in women of childbearing age who do not have the support of health workers as many as (81.6%). In statistically, it shows there is an influence of health worker support on pregnancy intentions in women of childbearing age (p = 0.000). According to Setiasih [20] health workers become one of the most responsible parties in campaigning family planning programs to the community, which family planning services are activities to overcome, regulate, and control the birth rate and also prevent unwanted pregnancies. However there are respondents (5.3%) although receiving support from health workers, but still had an unwanted pregnancy. Research who conducted by Sullikhah [21] suggests the majority of women who despite the support of health workers are actually women who do not use contraception but do not want a pregnancy. Health workers, and all elements in the healthy village are a center of information for women of childbearing age, therefore support of health which family planning counseling, and comprehensive counseling,

such as types, methods, disadvantages and excess contraception are very important to prevent pregnancy undesirable.

Unwanted pregnancy is more experienced by women of childbearing age who have a less threat perception that is 78.9%. Statistically, it shows there is influence of perception of threat to intention in women of childbearing age (p = 0.000). Research which conducted by Kahsay et al. [22] states women who feel threatened against unwanted pregnancy will have a great opportunity to prevent it and control their pregnancy. According to Hall's research [23] women who control pregnancy have the perception that an unwanted pregnancy can cause in changes in body shape and also an increased responsibility for raising children. The greatest threat, the greater of the possibility to take risk to solve the problem might arise [24]. There are respondents who have a good perception of threats but still had an unwanted pregnancy (6.1%). This is because individuals vary in assessing the risk of threats to themselves, even though their conditions are the same [24]. Some individuals often ignore the possibility of threats that will occur to them. Healthy village are formed as a media campaign to spread family planning programs. So that, women of childbearing age can find clear information, therefore women of childbearing age can take appropriate actions to overcome unwanted pregnancies that threaten them.

Respondents who have less susceptibility perception tend to unwanted pregnancy (90%). In statistically, it shows there is influence of perception of suseptibility to pregnancy intentions in women of childbearing age (p = 0.000). Research which conducted by King [25] states women who feel vulnerable to pregnancy will have behavior to prevent it. There are respondents who have a good perception of suseptibility but have an unwanted pregnancy (7.9%). This is because there are several perceptions that pregnancy is a natural for every woman. Perception of suseptibility will only affect health behavior if someone views that there are negative consequences of an unwanted pregnancy [25]. These consequences are medical consequences (death, disability, and pain), psychological consequences (depression, anxiety and fear), and social consequences (the impact on work, family life and social relations). Unwanted pregnancy is very related to the cessation of birth control. The healthy village was formed as a tool for fostering continuity of family planning, so it is hoped that with this development women of childbearing age will have a good understanding of the benefits of contraception and the perception of suseptibility to unwanted pregnancy will get better.

Most respondents who had an unwanted pregnancy are respondents who had a benefits perception are less 80%. In statistically, it shows there is an effect of benefits perception on intention to conceive in women of childbearing age (p = 0.000). The less assessment of individual about benefit health behavior, the fewer chance of preventing his disease [11]. The benefits of using contraceptive are related to effectiveness, eligibility, low hormonal risk and comfort to be used for a long period time. In this study, there are respondents who have a good perception of using the benefits of contraceptive but still have an unwanted pregnancy (7.4%). Benefit assessment is generated through a comparison between perceived benefits and perceived barriers from the behavior. The results of this comparison determine the direction of individual health actions to take or not to take these actions. Some women look at the benefits of contraception, are good for preventing pregnancy, they feel that the negative aspects derived from contraception are greater, such as discomfort in sexual intercourse, and also costs that must be incurred [23]. Healthy village are one of the strategic innovations to implement the priority activities of the KKBPK program as a whole. One of the achievements of the KKBPK program is setting birth spacing. The program distributes information about the benefits of using contraception. The better of mother's perception of the benefits contraception is expected the less the mother will have an unwanted pregnancy.

This study shows women who have the perception of large barriers to using contraceptive tend to unwanted pregnancies (72.7%). In statistically, it shows there is an effect of perceptions of barriers to pregnancy intentions in women of childbearing age (p = 0.000). Perceptions of barriers to using contraceptive include factors such as perceived side effects, discomfort, costs and also access to contraception [23]. In this study, there were respondents who had the perception of a small barriers of using contraceptive, but still had an unwanted pregnancy (10.2%). According to Castle and Askew [6] other factors that also influence using contraceptive are myths and rumors circulating, some information such as using contraception can cause infertility, cancer and other diseases affecting some women to stop using contraception. Community needs through a service approach. Comprehensive services can minimize barriers to using contraception, so that the perception of barriers to women of childbearing age such as the reach of family planning services, costs, and side effects will be smaller.

CONCLUSION

Based on the results of this study can be concluded age, husband's support, support of health workers, perception of threats, perception of suseptibility, perception of benefits, and perception of barriers have an influence on pregnancy intentions, but the most influential factor is husband's support, the greater the support given, the better a woman can realize her pregnancy intentions . The husband is expected to maintain the

support that has been given to his partner and health workers are expected to improve comprehensive health education in order to correct the myths related to contraception

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