Effect of Fillial Value and Commitment To Family Ability in Early Detection of High Risk Pregnancy

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ABSTRACT
Pregnancy and childbirth are physiological processes that women experience, but sometimes have risky conditions. There are still many pregnant women and their families who are unable to do early detection of high risk pregnancy. This study aims to determine the effect of filial value and commitment to family ability in early detection of high risk pregnancy.
This study used an analytic design with a cross sectional design. The sample size of 112 from a population of 155 was obtained by simple random sampling. The independent variables are filial value and commitment, while the dependent variable is the family's ability to detect high risk of pregnancy early. Data analysis using linear regression.
The results showed (52.7%) were in early adulthood (36-45 years), (62.5%) had secondary education, (75%) worked in private (57.1%) had good self-esteem, (52, 7%) self -motivated enough, (50%) good previous behavior. SEM-PLS statistical analysis, through CFA, it was found that individual factors were 1.999, fillial value were 10.23 and commitment was 13.78, on family abilities. The value of the fillial value (0.201), the value of commitment (0.102). R2 value (0.63) and Q2 value of 0.65.
Filial value and commitment factors are some of the factors that contribute to the ability of families to detect early high-risk pregnancy. In further research, it is necessary to involve other factors to increase family capacity, especially in the ability of families to detect high-risk pregnancies early.

Keywords: Fillial Value, Commitment, Family, Pregnancy

BACKGROUND

Pregnancy and childbirth are a physiological process that a woman experiences, but sometimes she experiences complications (Holness, 2018). Complications in pregnant women and childbirth are complex problems, because these pregnancy complications can cause immediate death. The ability of pregnant women and their families to detect complications or risky conditions early is still minimal, so they can cause emergencies that can endanger the welfare of the mother and fetus (Lee, Ayers, & Holden, 2016).

Surabaya City is one of the cities in East Java with pregnant women experiencing obstetric complications of 9,496 out of 47,480 pregnant women in 2016 (East Java Provincial Health Office, 2017). The number of high-risk pregnant women in 2015-2017 continues to increase, in 2015 there were 17,656 pregnant women, in 2016 there were 17,928 pregnant women, and in 2017 there were 19,698 pregnant women (Health Office of Surabaya, 2017).

The phenomenon in society today is that there are still many pregnant women and their families who are unable to do early detection of high risk pregnancies. This is proven by the low coverage of high risk early detection by the public. Community participation in early detection of high risk of pregnancy is still lacking due to low levels of education and family knowledge, unsupportive behaviors such as social position, and economic capacity (Health Office of Surabaya, 2017).

The impact if early detection of high-risk pregnancies is not carried out optimally by pregnant women, families and health workers, it causes 3 delays, namely recognizing danger signs of pregnancy and childbirth, late in making decisions, and late arriving at the hospital or late referral. The 3 delays resulted in higher Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR) (Fatkhiyah, Kodijah, & Masturoh, 2018).

The family is expected to act as the closest support system for pregnant women because there is a strong emotional attachment to helping care for the mother during her pregnancy, including detecting any abnormalities and danger signs (Fatkhiyah et al., 2018). Fillial values which are part of the Care Giver Empowerment Model (CEM) include an attitude of responsibility, respect, and care which are needed to maintain health in the family (Jones, Winslow, Lee, Burns , & Zhang, 2011). Based on the explanation of the concept of Health Promotion Models (HPM) put forward by (Pender, N.J, Murdaugh, CL, 2011) that requires commitment to realizing the family's ability to carry out a health behavior.

Early recognition of risk factors in pregnancy and childbirth should be carried out by pregnant women themselves and their families as much as possible (Klugman, Li, Barker, Parsons, & Dale, 2019). Early detection of the risk of complications during pregnancy and childbirth is needed so that efforts can be made to eliminate or minimize these risk factors (Aryawati, 2016).

METHODS

This study used an analytic design with a cross sectional design. The sample size of 112 from a population of 155 was obtained by simple random sampling. The independent variables are filial value and commitment, while the dependent variable is the family's ability to detect high risk of pregnancy early. Data analysis using SEM PLS.

RESULT
Table 1. Frequency Distribution of individual factors

Indicator	Sub Indicator	Frequency	Percentage (%)
Age	17-25 th	19	17.0
	26- 35 th	59	52.7
	36- 45 th	20	17.9
	46- 55 th	10	8.9
	56 – 65 th	3	2.7
	>65	1	0.9
	Total	112	100.0
Education	Basic	30	26.8
	Intermediate	70	62.5
	High	12	10.7
	Total	112	100.0
Profession	Housewife	15	13.4
	Private	84	75
	entrepreneur	11	9.8
	Civil servants	2	1.8
	Total	146	100.0
Self esteem	Less	7	6.3
	Enough	41	36.6
	Good	64	57.1
	Total	112	100.0
Self motivation	Less	11	9.8
	Enough	59	52.7
	Good	42	37.5
	Total	112	100.0
Previous behavior	Less	3	2.7
	Enough	53	47.3
	good	56	50
	Total	112	100.0

Source: Primary data, 2020

Table 1 shows that the age of the respondents is spread across all groups. Where the most age group is the age group 26-35 years at 52.7%, education spreads at all levels, with the highest level of education being secondary education as much as 62.5% and the respondents 'occupation is mostly private (75%), the respondents' self esteem mostly good (57.1%), self-motivation was mostly sufficient (52.7%) and the previous behavior was in the sufficient category, namely 47.3%.

Table 2. Frequency distribution based on the filial value variable

Indicator	Sub Indicator	Frequency	Percentage (%)
Responsible	Less	1	.9
	Enough	55	49.1
	Good	56	50.0
	Total	112	100.0
Attention	Enough	63	56.3
	Good	49	43.8
	Total	112	100.0
Care	Less	2	1.8
	Enough	63	56.3
	Good	47	42.0
	Total	112	100.0

Source: Primary data, 2020

Fillial value by family members in carrying out family duties in early detection of high risk of pregnancy, it is known that the responsibility is half well done, most of the attention and care given are sufficient.

Table 3. Frequency Distribution Based on the commitment variable

Indicator	Sub Indicator	Frequency	Percentage (%)
Affective	Enough	89	79.5
	Good	23	20.5
	Total	112	100.0
Continuance	Enough	88	78.6
	Good	24	21.4
	Total	112	100.0
Normative	Less	1	0.9
	Enough	97	86.6
	Good	14	12.5
	Total	112	100.0

Source: Primary data, 2020

Commitment by family members in carrying out family tasks in early detection of high risk pregnancy, it is known that almost all of them are affective, continuance and normative in the sufficient category.

Analysis of measurement models
The measurement model analysis process is carried out by testing the validity and reliability of the factor variables. The criterion for the indicator variable is concluded that it is valid to measure the factor variable, if the factor loading value has a t-statistical value ≥ t-table or if the t-statistics value of the influence weight ≥ t-table = t (n-1; 5% / 2) = t (92; 0.025) = 1.96. Meanwhile, it is concluded that it is not valid if the factor loading value and the influence weight value both have a t-statistic value <1.96. Furthermore, testing the

consistency / reliability of the factor variables using the composite reliability value and Alpha Cronbach. The criterion that the factors are concluded to be reliable is explained by the indicator variable, if the composite value is> 0.7 then the consistency of the factors is good, and if the value is 0.6 to 0.7 it is still acceptable.

SEM-PLS statistical analysis, through CFA, it was found that individual factors were 1.999, fillial value were 10.23 and commitment was 13.78, on family abilities. The value of the influence of individual factors (0.102), the value of the interpersonal influence (0.754), the fillial value (0.201), the value of commitment (0.102). R2 value (0.63) and Q2 value of 0.65.

DISCUSSION

In this study, almost half of them were in the 26-35 years age group of 52.7%. For family members who are old enough, the level of maturity and family strength will be more mature in thinking and acting. This can be seen from the experience and maturity of his soul. Age is one of the factors that influence a person's health behavior (Lin, 2018).

Most family education is secondary education (SMA) 62.5%. Lack of community participation in early detection of high risk of pregnancy is due to low levels of education and knowledge, low income which results in unsupportive behavior. Education is one way for families to receive knowledge about antenatal care, with high education and good knowledge it will make families easy to receive information and carry out early detection of high-risk pregnancies (Mehta, 2019).

Most of the respondents' occupations are private (75%). This income is very influential on family behavior, including pregnant women. A good income level allows family members to get better fulfillment of needs, for example in the fields of education, health, career development and so on. Health care professionals should carefully assess the state of family empowerment of younger primary caregivers and those with low education, low household income, high childcare burdens, and fragile bonds between family members. Thus home visits and institutional services for the provision of care and services are well coordinated (Wakimizu, 2018).

The previous behavior in this case was the experience of respondents from the results of the study, most of them (47.3%) were sufficient in getting counseling about risky pregnancies. In addition, most respondents considered themselves to have experienced previous child pregnancies and based on the experiences of other people who have been pregnant and given birth. A collaborative education model with a multi-disciplinary approach to patient education will be very important for providing information related to the counseling provided to minimize maternal mortality and morbidity (Jain, 2017).

Family behavior in early detection of high risk pregnancies is influenced by one's health beliefs in the HBM (Health Belief Model) theory. HBM (Health Belief Model) is used to identify several important priority factors that have an impact on behavior (Huang, 2020).

Human behavior occurs through a stimulus-organism-response process. The behavior in question is family behavior in early detection of high-risk pregnancy, where the behavior is related to factors of age, education, income, knowledge, experience and media exposure. In fact, the role of husband and family also influences pregnant women in supporting the behavior or actions of pregnant women in utilizing health services (Chou, 2018).

A person's health behavior is determined, among other things, by the presence or absence of support from their surroundings (social support) in this case midwives are the main health care providers during pregnancy, they ideally emphasize the availability of questions during antenatal examinations (Baron, 2017). People who live in an environment

that upholds the health aspects will be more enthusiastic in maintaining their health (Yeh, 2016). Maternal and child health needs to be improved, so in an effort to improve it needs an approach that is carried out holistically and integratively which is not only limited to the medical health sector, but also economics, education and social affairs.

CONCLUSION

The determinant factors that contribute to the family's ability to detect high risk of pregnancy need to be considered so that families are independent and have efforts to maintain the health of pregnant women in the family. Furthermore, it is necessary to interact with other factors to increase family capacity, especially in the ability of families to detect high risk pregnancies early.

REFERENCES

Abdollahpour S, Ramezani S, Khosravi A. (2015). *Perceived social support among family in pregnant women. Int J Pediatr; 3:879e88*. https://doi.org/ 10.22038/IJP.2015.4703.

Baron, R., Heesterbeek, Q., Manniën, J., Hutton, E. K., Brug, J., & Westerman, M. J. (2017). Exploring health education with midwives, as perceived by pregnant women in primary care: A qualitative study in the Netherlands. Midwifery, 46, 37–44. doi:10.1016/j.midw.2017.01.012

Budiati, Tri., Setyowati. (2019). The influence culture and maternal care on exclusive breastfeeding practice in post caesarean section mothers. Enfermería Clínica. Volume 29, Supplement 2, September 2019, Pages 808-814

Chiwomitz, H., Gerard, M., Fossa, A., Bourgeois, F., & Bell, S. K. (2018). Empowering Informal Caregivers with Health Information: OpenNotes as a Safety Strategy, The Joint Commission Journal on Quality and Patient Safety, 44:130–136

Chou, J. L., Pierce, K. J., Pennington, L. B., Seiler, R., Michael, J., Mc Namara. D., & Zand, D. (2018). Social Support, Family Empowerment, Substance Use, and Perceived Parenting *Competency during Pregnancy for Women with Substance Use Disorders, Substance Use & Misuse*, Vol. 0, No. 0, 1-7

Dewi. (2017). *Pengaruh Kemampuan Ibu Hamil Dalam Melakukan Deteksi Dini Risiko Preeklamsia Terhadap Paritas, Pengetahuan Dan Keterpaparan Informa*si. Program Studi S1 Ilmu Kesehatan Masyarakat Fakultas Kesehatan, Universitas Nahdlatul Ulama Surabaya. MTPH Journal. Volume 01 Nomor 01 Tahun 2017

Diana, Rian., Rahmayanti, Riris D., Anwar. F., Khomsan, Ali., Christianti, Dyan F., Kusuma, Rendra. (2018). *Food taboos and suggestions among Madurese pregnant women: a qualitative study.* Journal of Ethnic Foods. Volume 5, Issue 4, December 2018, Pages 246-253

Dinkes Kota Surabaya. (2018). *Laporan Kesehatan Keluarga (KESGA)* .Dinas Kesehatan Kota Surabaya, Surabaya.

Dinkes Provinsi Jawa Timur. (2017). *Profil Kesehatan Provinsi Jawa Timur Tahun 2016*. Surabaya : Dinas Kesehatan Provinsi Jawa Timur

Holness, N. (2018). *High-Risk Pregnancy. Nursing Clinics of North America,* 53(2), 241–251. doi:10.1016/j.cnur.2018.01.010

Huang, X., Dai, S., & Xu, H. (2020). Predicting tourists' health risk preventative behaviour and travelling satisfaction in Tibet: Combining the theory of planned behaviour and health belief model. Tourism Management Perspectives, 33, 100589.

Indriyani, Asmuji. (2016). *Model Family Centered Maternity Care sebagai Strategi Optimalisasi Competent Mothering*. Jurnal Ners 11 (1), 17-28

Jain, J., & Moroz, L. (2017). Strategies to reduce disparities in maternal morbidity and mortality: Patient and provider education. Seminars in Perinatology, 41(5), 323–328. doi:10.1053/j.semperi.2017.04.010

Kemenkes RI. (2017). *Profil Kesehatan Indonesia.* Kementrian Kesehatan Republik Indonesia

Klugman, Jeni., Li.Li., Barker, K.M., Parsons.J., Dale.K. (2019). How are the domains of women's inclusion, justice, and security associated with maternal and infant mortality across countries? Insights from the Women, Peace, and Security Index. SSM - Population Health. Volume 9, December 2019, 100486

Lee, Suzanne., Ayers, Susan., Holden, Des. (2016). *Risk perception and choice of place of birth in women with high risk pregnancies : A qualitative study*. Midwifery 38. 49–54.

Lin, C.-Y., Broström, A., Nilsen, P., & Pakpour, A. H. (2018). Using extended theory of planned behavior to understand aspirin adherence in pregnant women. Pregnancy Hypertension, 12, 84–89. doi:10.1016/j.preghy.2018.04.001

Masturoh, Pamuji, Siti E.B., Siswati. (2018). Path Analisis : Tiga Keterlambatan Penyebab Kematian Maternal Di Kabupaten Brebes. Jurnal Kesehatan Pena Medika Vol 8 (1) Juni 2018. Fakultas Ilmu Kesehatan Universitas Pekalongan. ISSN : 2086-843X

Mehta, N.K., Zheng, Hui., Myrskyla. (2019). How do age and major risk factors for mortality interact over the life-course? Implications for health disparities research and public health policy. SSM - Population Health. Volume 8, August 2019, 100438

Mihiretu, Meskele. (2017). *Health care decision making autonomy of women from rural districts of Southern Ethiopia: a community based cross-sectional study*. Int J Womens Health. 2017 Apr 19;9:213-221. doi: 10.2147/IJWH.S131139. eCollection 2017.

Joyce, NM., Tully. E., Kirkham. Colin., Dicker. P., Breathnach, Fionnuala M. (2018). *Perinatal mortality or severe neonatal encephalopathy among normally formed singleton pregnancies according to obstetric risk status:" is low risk the new high risk?" A population-based cohort study*. European Journal of Obstetrics & Gynecology and Reproductive Biology 228 (2018) 71–75

Nursalam. (2017). Metodologi Penelitian Ilmu Keperawatan : Pendekatan Praktis. Cetakan Kedua Edisi 4. Jakarta : Salemba Medika

Khadijah, Siti., Arneti. (2018). Upaya Deteksi Dini Resiko Tinggi Kehamilan Ditentukan Oleh Pengetahuan dan Dukungan Tenaga Kesehatan. Jurnal Sehat Mandiri, Volume 13 No 1 Juni 2018 p-ISSN 19708-8517, e-ISSN 2615-8760

Tobing, Vella Yovinna., Afiyanti, Yati., Racmawati, Imami Nur. (2019). *Following the cultural norms as an effort to protect the mother and the baby during the perinatal period: An ethnographic study of women's food choices*. Enfermería Clínica Volume 29, Supplement 2, September 2019, Pages 831-836

Wakimizu, R., Fujioka, H., Nishigaki, K., & Matsuzawa, A. (2018). *Family empowerment and associated factors in Japanese families raising a child with severe motor and intellectual disabilities, International Journal of Nursing Sciences*, doi: https://doi.org/10.1016/j.ijnss.2018.09.006.

Waryana. (2016). *Promosi Kesehatan, Penyuluhan, Dan Pemberdayaan Masyarakat*. Nuha Medika

Widarta, DG, Laksana, MAC, Sulistyono, A & Purnomo, W. (2015). *Deteksi dini risiko ibu hamil dengan kartu skor poedji rochyati dan pencegahan faktor empat terlambat*. Majalah Obstetri & Ginekologi. Vo. 23 No. 1 Januari 2015

Yeh, H.-Y., Ma, W.-F., Huang, J.-L., Hsueh, K.-C., & Chiang, L.-C. (2016). *Evaluating the effectiveness of a family empowerment program on family function and pulmonary function of children with asthma: A randomized control trial, International Journal of Nursing Studies*, 60, 133–144

Zand, D. H., Chou, J. L., Pierce, K. J., Pennington, L. B., Dickens, R. R., Michael, J., McNamara, D., & White, T. (2017). *Parenting self-efficacy and empowerment among expectant mothers with substance use disorders.* Midwifery. 2017 May;48:32-38. doi: 10.1016/j.midw.2017.03.003. Epub 2017 Mar 7.