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Determinants of Safe Childbirth Planning in Gresik District Using PLS Analysis

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Abstract
Introduction*: The number of Maternity death determines the level of health in one nation. The safe childbirth planning is treated to decreease women while pregnant in order to prevent from complications while having a baby or shortly after pregnancy result in the mother's death. In this case, the mother and infant can have a safe and healthy motherhood.*
The Objectives*: The aim of this study is to analyze the determinants of safe childbirth planning in Gresik district using PLS Analysis*
Methods*: This study employs analitical research by using cross sectional approach. The respondents are the women of third semester pregnancy. The number of respondents are 110. Technique that is used in this study is simple random sampling. Furthermore, questionnaire is selected as data collection technique. Meanwhile SEM with PLS approach is applied to analyze the data.*
Result*: The result shows that only 10,9% the women of third semester pregnancy who have implemented the safe childbirth planning. The result of analysis denotes that the level of family's status influences the health service acces, for example, the better family's status increases 50,9% of which the maternal healthy services to be accessed. Another aspect is the impact of medical status toward safe childbirth planning in which the better status of pregnancy enhances the safe childbirth planning in point 26%. In addition, the impact of the have access to health services dealt with the safe childbirth planning, i.e. the better access of health care that is obtained by a mother can enhance the safe childbirth planning denoting 16,3%. In short, family status affects indirectly the safe childbirth planning with mediation of health service access variables.*
Conclusion*: The conclusion that safe childbirth planning that implemented by maternal is low. Secondly, family status (husband and family support) influences indirectly to this planning via health care access. Thus, the role of medical staffs, a husband and nuclear family, inter departments, and the important local societies are needed to design safe childbirth planning for maternity.*
Keywords: *safe childbirth planning*

I. INTRODUCTION

Maternal mortality encompasess the indicator the degree of healthy life of a nation. The number of maternal deaths in Indonesia is 359 for each 100 thousands of life natal (SDKI 2012). In 2007 based on the data in *SDKI (Survei Demografi dan Kesehatan Indonesia* or Indonesian Survey of Demography and Health), the number increased 228 for each 100 thousands life natal and this makes the target of MDG's for the year 2015 (i.e. 102 for each 100 thousands life natal) didn't achieved. Many factors influence the high number of maternal mortality, such as the women's medical report, inferiority, and low educational level (Saifuddin, 2006)[1]. McCarthy and Maine Theory (1992) state that 3 factors determine the proses of maternal mortality, namely, closed determinants such as, pregnancy and complications, secondly is middle determinants are the medical report of motherhood, reproductive status, the access to medical care, the behaviour of nurses and how obtaining the healthy practices and other unpredictable factors. The third determinant is far-determinant namely a woman status in a family and in a society, family satus in a socienty and society status[2]. Indonesian goverment has conducted many programs to lessen maternity mortality. One of the programs is Childbirth Planning and Complication Prevention (CPCP). This program encourages husbands, nuclear family, and society to participate actively in safe childbirth planning and help to prevent the complication for women in pregnancy, by follow the program family planning post-childbirth therefore the reach and the quality of medical care for a mother and an infant increase.[3]. Rifaskes 2011[4], confirms that CPCP's programme in Gresik District has implemented by local health care centre in 96.9%. Based on data from Riskesdas (2013) [5], the result of welcoming childbirth's observation sheet in KIA's book showed that the value 81,1% of items do not giving information about childbirth helper, financial, ambulance, post-pregnancy family planning methods, blood donation.

Preliminary study that was conducted in Menganti distict obtaining 4 women in pregnancy of third sementer and 3 women post pregnancy less than 42 days denote that CPCP components hadn't achieved, such as, no transportation for the patients, no saving for mother during childbirth in indonesian called 'tabungan ibu bersalin' or 'tabulin' or social fund for maternal during childbirth or in Indonesia called 'dana sosial ibu bersalin' or

'dasolin' for preparing the childbirth expenses. Sometimes, the filling of CPCP sticker do not contact with the family of women's in pregnancy. These women are only asked to put the sticker on the visible area at their home. This doesn't work properly since some women in pregnancy do not understand the function of the sticker. this happened by attaching stickers in the wrong place and more over, the sticker was put in rubbish basket because the women thought they were useless. Besides, the mid-wife rarely gives counseling the symtoms of dangerous pregnancy, childbirth and post-pregnancy and how to prepare for having a baby. Mid-wives ignores home visit to patients.

Safe childbirth planning implemented by women in pregnacy to prevent complication while having a baby and post-pregnancy in order to have a safe and healthy mother and baby. This planning of this research consists of aid childbirth planning, maternity home planning, transportation planning, financial childbirth planning and blood donation to be planning. The purpose of the study is to analyze the determinats safe childbirth planning in Gresik District.

II. METHOD

This study employs analitical study by using *cross sectional* approach that was done within March to April 2017. The respondents are 110 women in pragnancy of third semester which live in District of Gresik that are Menganti, Driyorejo, Kedamean, and Wringinanom Sub Districts. Sampling technique which is applied is *simple random sampling.* And data collecting technique applies quesionaire. Thus, the analisis data uses SEM by using PLS approach.

III. RESULTS

A mother can be said implementing safe childbirth planning if a pregnant mother has planned who will help her while having a baby, a maternity home based on the risk of her pregnancy in *KSPR* (*Kartu Skor Poedji Rochjati* / scoring card of Poedji Rochjati). The mother has planned the transportation and fee for having a baby. Besides, she has contacted the blood donation to be according to her blood type. Table 1 shows that only 10.9% of women in pregnancy of third semester that have done safe childbirth planning.

Table 1. Safe childbirth planning of women's pregnancy of third semester in Gresik District.

Childbirth Planning	n	%
Safe	12	10,9
Not safe	98	80,9
Total	110	100,0

There are some factors that influence a mother to decide doing safe childbirth planning. In this study, the factors are analyzed by applying PLS.[6]. The result of analysis which is shown in figure 1.

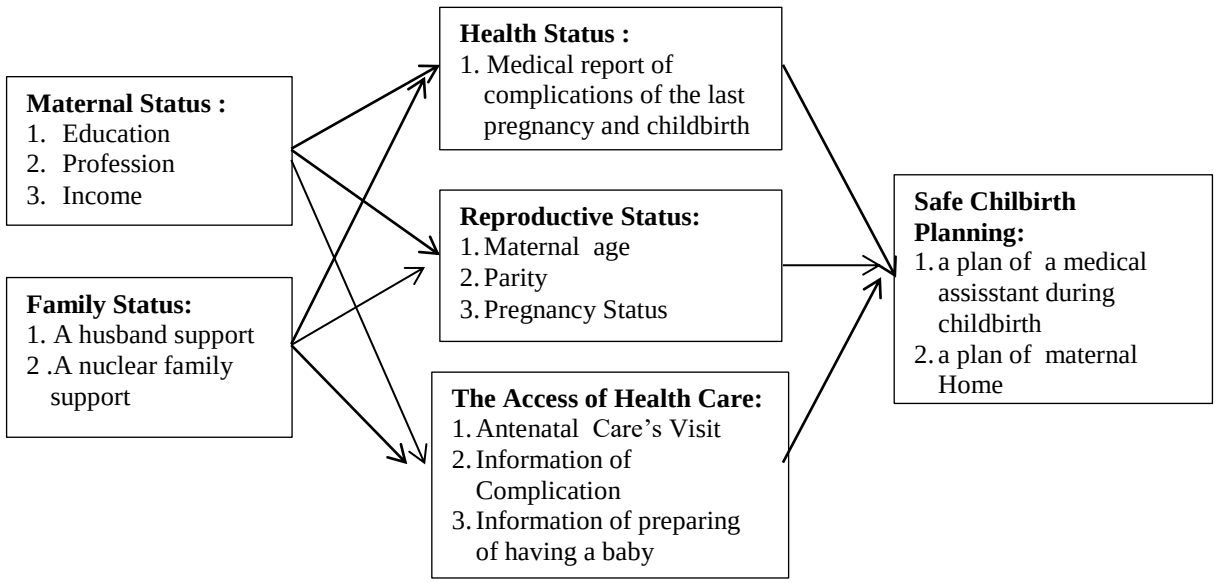

Figure 1. Structural Model of Factors determining Safe Childbirth Planning

This study applied PLS's analysis using *software SmartPLS ver 3 for windows* in order to recognize the direct and indirect influencies of safe childbirth planning. The significance level α of this study is 5% with the value of *t* statistically 1,96 so if the *P*-value < α is statistical significance. Direct influence inter latent variables can be seen

in table 2. This table denotes that family status has a contribution to access health services. The better family status enhances the access to obtain maternal health services around 50,9%. In addition, the health status brings an impact toward safe childbirth planning by showing 26% of a higher safe childbirth planning from a better motherhood health status. The inter variable of health care access and variable safe childbirth planning showed that the better health services access received by maternity the higher value of safe childbirth planning is 16.3 %.

Tabel 2. Output *Path Coeficient*

Variable	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Notes
Maternal Status -> health services access	0.066	0.076	0.082	0.803	0.423	Not significant
Maternal Status -> health status	0.161	0.170	0.114	1.410	0.159	Not significant
Maternal Status -> reproductive system status	0.195	0.185	0.114	1.704	0.089	Not significant
Health service access -> safe childbirth planning	**0.163**	0.167	0.081	**2.014**	**0.045**	**Significant**
Family status -> health service access	**0.509**	0.507	0.070	**7.259**	**0.000**	**Significant**
Family status -> health status	0.044	0.050	0.104	0.426	0.671	Not significant
Family status -> reproductive system status	0.096	0.108	0.098	0.983	0.326	Not significant
Health status -> safe childbirth planning	**0.260**	0.248	0.098	**2.656**	**0.008**	**Significant**
reproductive system status > safe childbirth planning	0.151	0.162	0.149	1.011	0.312	Not significant

In addition, the indirect influences of latent variables are shown by table 3. Table 3 denotes the indirect inflluences of variable family status toward variable safe childbirth planning. The result of table 2 shows that family status has impact toward the access of health care and the access of health care brings the influences toward safe childbirth planning. Therefore, family status has indirect influence toward safe childbirth planning which is represented by variable of health service access.

Tabel 3 The Result of *Indirect Effect Testing*

Variabel	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Notes
Maternal Status -> safe childbirth planning	0,082	0,091	0,054	1,527	0,127	Not significant
Family Status -> safe childbirth planning	0,109	0,116	0,054	**2,031**	**0,043**	**Significant**

IV. DISCUSSION

A pregnant woman who engages safe childbirth planning means that this woman has implemented the goverment programme namely CPCP. This relates to the complications of pregnancy [7]. The support from a woman's couple influences a mother enjoys the services that are provided by health care during antenatal. This support drives the motivation to his wife not only in morality but also in material [8]. Secondly, the higher family support increases the scope of antenatal services [9]. The supports both from woman's couple and her family increase the participation of maternal in pregnancy class, too. A woman who join the pregnancy class has a chance to get an information about complications and preparation of having a baby [10].

In addition, the medical report of last pregnancy complications and childbirth influeces a woman who pregnant to make decision particularly the matters relating to childbirth preparation. The data shows the increasing responsibility of high risk pregnant women relates to the fetus' welfare so they tend to put their trust in competence medical staffs such as nurses and doctors to care their health.[11]. Moreover, the pregnant woman that recognize her problems with her pregnancy will visit health care centre as earlier as possible because she worries

of her health[12]. An adequte employing antenatal care has positive association with childbirth from the aspect of health facilites[13]. Woman's couple and family's supports contributes this positive relationships because their roles are to influence the other family's member to make a decision. The one who give the influences will evaluate the given alternatives. The one who influences has an important role to force the decision making whether to choose, to accept or to reject a product or a service. Similarly, the process is like the decision to plan childbirth safety.[14] .

V. CONCLUSION

Safe childbirth planning by maternity are low. Besides, the family status (husband's support and nuclear family) has impact indirectly to safe childbirth planning through the access of medical practices, the role of medical staffs, husband supports and family supports, the role of inter departements, and important locat people are needed to design safe childbirth planning for maternity.

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REFERENCES

1. Saifudin, A. B (2006). *Buku acuan pelayanan nasional maternal dan neonatal*. Jakarta : PT Yayasan Bina Pustaka Sarwono Prawirohardjo
2. McCarthy J and D Maine, (1992). *A Framework for Determining Maternal Mortality*. Studies in Family Planning 22 : 23 – 33
3. Depkes RI, (2009). Pedoman Perencanaan Persalinan dan Pencegahan Komplikasi (P4K) dengan Stiker, Jakarta : Departemen Kesehatan RI
4. Balitbangkes, (2011). Laporan Nasional Riset Fasilitas Kesehatan 2011 (Laporan Puskesmas), Jakarta : Badan Penelitian dan Pengembangan Kesehatan Kementerian Kesehatan RI.
5. Balitbangkes, (2013). Laporan Riset Kesehatan Dasar 2013, Jakarta : Badan Penelitian dan Pengembangan Kesehatan Kementerian Kesehatan RI
6. Hair et al, (2014). A Primer on Partial Least Squares Structural Equation Modelling (PLS-SEM). United States of America : SAGE Publications, Inc.
7. Werdiyanthi Ni Made, Mulyadi, Karundeng Michael, (2017). Hubungan Penerapan Program Perencanaan Persalinan dan Pencegahan Komplikasi Kehamilan oleh Ibu Hamil dengan Komplikasi Kehamilan di Puskesmas Doloduo Kabupaten Bolaang Mongondow. *E-Journal Keperawatan (EKP).* Volome 5 Nomor 1 February 2017
8. Sari Gita Nirmala, dkk, (2015). Faktor Pendidikan, Pengetahuan, Paritas, Dukungan Keluarga dan Penghasilan Keluarga yang Berhubungan dengan Pemanfaatan Pelayanan Antenatal. *Jurnal Ilmu dan Teknologi Kesehatan***,** Vol. 2, Nomor 2, Maret 2015, p : 77 – 82
9. Agustini, N. M., Suryani, N., & Murdani, P. (2013). Hubungan Antara Tingkat Pengetahuan Ibu dan Dukungan Keluarga dengan Cakupan Pelayanan Antenatal di Wilayah Kerja Puskesmas Buleleng I. *Jurnal Magister Kedokteran Keluarga*, Vol.1, No.1, p: 67 – 69
10. Masini, (2015). Pengaruh Gravida, Pekerjaan, Dukungan Suami, Dukungan Bidan/Tenaga Kesehatan terhadapPartisipasi Ibu dalam Kelas Ibu Hamil di Kabupaten Magelang. *Jurnal Kebidanan* Vol.4 No. 8. April 2015, p : 37- 44
11. Harrison, M. J., Kushner, K. E, Benzies, K., Rempel, G., Kimak, C. (2003). Women's Satisfaction with Their Involvement in Health Care Decisions During a High-Risk Pregnancy. *Birth*, Vol 30 No 2. p :109-115
12. Hildingsson, Waldenstrom, dan Radestad (2002), Women's expectations on antenatal care as assessed in early pregnancy: number of visits, continuity of caregiver and general content, http://www.ncbi.nlm.nih.gov/entrez/utils /fref.fcgi?Prld, (sitasi 2 July 2017)
13. Maeni Nur Laeli, Trihandini Indang (2014). Hubungan Pemanfaatan Antenatal Care dengan Pemilihan Tempat Persalinan di Indonesia: Analisis Lanjut Survei Demografi dan Kesehatan Indonesia 2012). http://lib.ui.ac.id/naskahringkas/2016-04/S54857-Laeli%20Nur%20Maeni (sitasi 1 July 2017)
14. Schiffman, L & Kanuk L.L. 2007. *Perilaku konsumen*, trans. K Zulkifli edk7. Jakarta; PT Indeks