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Factors Leading to Maternal Depressive Symptoms for Working Mothers during Their Pregnancy and Postpartum

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Abstract: *Pregnancy and postpartum are adaptation processes leading to physical and psychological changes. Pregnant and postpartum women are at risk of suffering psychological disorders, namely maternal depressive symptoms, a situation that is able to reduce the quality of life. Working mothers usually have double burdens, and those who suffer the symptoms in this situation would suffer worse impacts. This research is intended to know maternal depressive symptoms and factors leading to it for working mothers during their pregnancy and postpartum. The study employs a cross-sectional design. The population of the research is 97 working mothers who entrust their 1-12 months old babies in daycares in Bukittinggi. Edinburgh Postnatal Depression Scale (EPDS) is employed to measure maternal depressive symptoms, and the statistical test in use to see factors of age, parity, education, and income towards maternal depressive symptoms is chi-square. The research finds that most of the respondents do not suffer maternal depressive symptoms (60,8%), and the connection analysis uncovers p values for age is 0,216, for parity is 0,001, for education is 0,038, and for income is 0,099. Accordingly, of several factors analyzed, the factors leading to maternal depressive symptoms are parity and education, while the other two, age and income, play no impact.*

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I. Introduction

For a working woman, to decide to have a child or to start getting pregnancy is not a simple matter, because becoming a mother while having a job would mean holding more burden than a stay-at-home mother. There will be anxiety once they decide to have a pregnancy with regards to their job and their pregnancy as well. The anxiety has a strong connection to the work schedule as well as work rate during the pregnancy. They will normally be afraid of inability to work at its optimum focus because of being overwhelmed by pregnancy, a situation that would probably disrupt their work, or the other way around.[1]

This kind of physical disorder, called postpartum, normally occurs from the light to the heavy one. Several literatures classify postpartum into three categories: postpartum blues, postpartum depression and postpartum psychosis. Should the three levels of postpartum have overlapping symptoms between one to others, it is then classified as maternal depressive symptoms.[2,3]

The prevalence of the occurrence of maternal depressive symptoms varies across the world. The rate of postpartum blues ranges from 30% to 75% of all women giving birth, that of postpartum depression is around 10% to 15%, and that of postpartum psychosis ranges from one to two cases per a thousand labour.[4]

According to a report from WHO, the estimation of light depression for labour women ranges from ten per a thousand living birth, and the medium and heavy postpartum depression is around thirty to two hundred per a thousand of living birth.[5] The rate of postpartum depression in various countries in the world is around 10-34%. In Asia, the figure of postpartum depression is rather high and varies from 26-85% of women after labour. That figure is rather higher in Indonesia compared to other Asia countries due to differences of psycocultural factors, diagnosis hardship, the lack of diagnosis instrument, and unawareness of the labour woman.[6]

The psychiatric disorder of maternal depressive symptoms normally occurs for women who does not get a proper diagnosis and other necessary treatmentsduring pregnancy and postpartum. The majority of patients do not get adequate treatment as part of the obstetrical treatment, without which the situation would potentially become a year of postpartum or more, leading to the lowering of life quality. If this situation gets lack proper attention, it will worsen the condition of the baby as well as the mother.[7,8]

Against this backdrop, research about factors leading to maternal depressive symptoms for postpartum working mother is needed.

II. Material and Methods

This study conducts analytical research using the cross-sectional method, which means observation, measuring, and documentation of every independent and dependent variable that are conducted in parallel and only once to the research subject. The primary data is achieved through an interview with the respondents using the prepared questionnaire. The secondary data is gathered from the respective Public Health Office and daycares. The analysis to be conducted is univariate and bivariate analysis.

The population of this research is 97 working mothers who entrust their 1-12 moths old babies in daycares in Bukittinggi. The instrument of research includes questionnaire to understand the age, parity, education, and income of the respondents, Edinburgh Postnatal Depression Scale (EPDS) for measuring maternal depressive symptoms, and the statistic evaluation in use is chi-square to see the correlation with observed factors with maternal depressive symptoms.

III. Result

Univariat Analysis

This research finds that out of 97 respondents of working mothers who entrust their 1-12 months babies in daycares in Bukittinggi, there is a figure of 60.8% that does not have maternal depressive symptoms, while the other 39.2% suffer from maternal depressive symptoms (table 1).

Table no 1: Shows the distribution of the frequency of maternal depressive symptoms.

No	Maternal Depresive Symptoms	f	%
1	Without MDS	59	60,8
2	With MDS	38	39,2
	Total	**97**	**100**

Bivariate Analysis

The analysis on age with regards to the occurrence of maternal depressive symptoms with chi-square reveals p-value 0.216 (p-value > 0.05), which means that there is no connection between age and the occurrence of maternal depressive symptoms for working mother during pregnancy and postpartum (Table 2).

Table no 2: Shows the connection between age and maternal depressive symptoms.

Age	Maternal Depressive Symptoms				Total		P Value
	Without MD		With MD				
	f	%	f	%	F	%	
Low Risk	48	58,5	34	41,5	82	100	**0,216**
Hight Risk	11	73,3	4	26,7	15	100	
Total	**59**	**68,0**	**38**	**39,2**	**97**	**100**	

The analysis on the parity status with regards to the occurrence of maternal depressive symptoms with chi-square reveals p-value 0.001 (p-value < 0.05), which means that there is a significant connection between the parity status of the working mother with the chance of maternal depressive symptoms during pregnancy and postpartum (Table 3).

Table no 3: Shows the connection between the parity status and maternal depressive symptoms.

Parity	Maternal Depressive Symptoms				Total		P Value
	Without MD		With MD				
	f	%	f	%	F	%	
Primipara	16	37,2	27	62,8	43	100	**0,001**
Multipara	45	79,6	11	20,4	54	100	
Total	**59**	**68,0**	**38**	**39,2**	**97**	**100**	

The analysis on the education level with regards to the occurrence of maternal depressive symptoms with chi-square reveals p-value 0.038 (p-value < 0.05), which means that there is a significant connection between the education level with the occurrence of maternal depressive symptoms for working mother during pregnancy and postpartum (Table 4).

Table no 4: Shows the connection between the education level and maternal depressive symptoms.

Education	Maternal Depressive Symptoms				Total		P Value
	Without MD		With MD				
	f	%	f	%	F	%	
Low	2	25	6	74	8	100	0,038
Hight	57	64	32	36	89	100	
Total	59	68,0	38	39,2	97	100	

The analysis on the income level with regards to the occurrence of maternal depressive symptoms with chi-square reveals p-value 0.216 (p-value > 0.05), which means that there is no significant correlation between the income level of the mother with maternal depression symptoms for working mother during pregnancy and postpartum (Table 5).

Table no 5: Shows the connection between the income level and maternal depressive symptoms.

Income	Maternal Depressive Symptoms				Total		P Value
	Without MD		With MD				
	f	%	f	%	F	%	
<Rp.1,8jt	25	53,2	22	46,8	47	100	0,216
>Rp.1,8jt	34	68	16	32	50	100	
Total	59	68,0	38	39,2	97	100	

IV. Discussion

Maternal Depressive Symptoms

The result of this research sees the score of maternal depressive symptoms for postpartum working mother based on the decision of Arizona Health Care Cost Containment System (AHCCCS) year 2009 that was employed by Sari (2009). The result of the calculation through the Edinburgh Postnatal Depression Scale (EPDS) indicates that with the point of ≥ 10, the average of respondents identified as having maternal depressive symptoms. This research finds the distribution of the frequency of the observed respondents in all of the daycares in Bukittinggi, that 38 out of 97 respondents are identified with maternal depressive symptoms (having less than ≥ 10), and 60,8% (59 people) are without the symptoms.

The figure found by this research is considerably lower than the value reported by the National Institute for Health Care Management Foundation (NIHCM) year 2010, which reveals that 50-80% of the postpartum mother have maternal depressive symptoms. Depressive postpartum is a middle level of maternal depressive symptoms. The figure of the occurrence of maternal depressive symptoms in this research is significantly lower than an investigation conducted by Fidora in 2015, which found that 88,6% of postpartum mother got depression in the first week of postpartum.[9]

This result of this research is in line with the theory proposed by Crockenberg and Leekers (2003), cited by Roswiyani, which says that between 10-30% of postpartum mother encountered a certain level of depression and the situation could continue the whole year after the delivery.[10] Besides, Mental Health Association (2003), also cited by Roswiyani (2010), states that 70% of postpartum mothers encountered psychological disorder, either directly after the childbirth up to the twelfth months or during the fourth week to the sixth month.[10] The level of the disorder could be better after several weeks. For postpartum mother, the situation generally occurs in the first year after the delivery.[2]

The different findings between the current research and several similar previous studies that deal with the score of maternal depressive symptoms, we assume, is due to the time of data collection. Based on the theory, the longer the period of postpartum of a mother, the lower the score of maternal depressive symptoms will be.

The connection between age and maternal depressive symptoms

This study finds that out of 82 respondents with the lower risk of the maternal depression there is a figure of 58,5% (48 people) that is free from maternal depressive symptoms, and 41,5% (34 people) that is with the symptoms. This study findsthat out of 15 respondents with the higher risk of maternal depression there is a figure of 73,3% (11 people) that is free from maternal depressive symptoms, and 26,7% (4 people) are with the symptoms. This study reveals that there is no significant connection between the age of mother with maternal depressive symptoms.

The research of Prasetyo reveals a different finding that there is a significant connection between the age of mother with the occurrence of postpartum blues, the lightest level of maternal depressive symptoms.[11] A research conducted by Paramasatya also finds the correlation between the age of mother with the occurrence of postpartum blues, as much as 0.047, meaning that statistically the age of the mother is a variable that has a connection to postpartum blues.[12]Risk analysis reveals that mother below 20 years old and above 35 years old have as four times as many possibilities of suffering from baby blues as the mother in between 21-35 years old.

The research of Nasri et al. finds that within the 39,5% case of postpartum depression, the majority of respondents are those in between 20-35 years old (the lower risk). In many instances, postpartum depression commonly happens to mothers who get pregnant or has the delivery below 20 years old.[13]

Mansur, cited by Paramasatya, suggests that the cases of postpartum blues occur mostly in pre-productive age (before 20-year-old).[12]Prawiroharjo explains that from the physical anatomy perspective, that before 20 years old, the reproductive organs are in its premature condition for the delivery of a baby which results in anxiety with regards to pregnancy as well as labour, while in mother above 35 years old, those organs are too old for the pregnancy and labour affairs.[14] According to Padila, pregnancy and labour for women with risk age could rise the potential of postpartum blues and a similar psychological disorder.[15]

This analysis reveals that there is no significant connection between the age of mother with the occurrence of maternal depressive symptoms. The age of the mother does not affect the likeliness of the appearance of maternal depressive symptoms; however, it could happen for other factors. In this research, the respondents are mostly woman with a lower risk of the depression. They are also in their productive age so that the age of the mother does not relate to maternal depressive symptoms.

The connection of Parity with Maternal Depressive Symptoms

This study reveals that out of 43 respondents with primipara parity, there is a figure of 37.2% (16 people) that is free from maternal depressive symptoms, while the other 62.8% (27 people) is suffering from the symptoms. It also findsthat out of 54 respondents with multipara parity, there is the figure of 79.6% (45 people) of all respondents that are free from maternal depressive symptoms, while the other 20.4% (11 people) is with the symptoms. The analysis finds a significant connection between parity and maternal depressive symptoms.

The effect of parity is also the subject of study by Irawati and Yuliani in 2013. They found that the number of children can lead to postpartum blues.[16] Unlike their study, Soep found that the case of maternal depression is higher to mother with one child than that with two or more children.[17] Recently giving birth mothers tends to suffer from the depression because of the adaptation phase after the delivery. They used to think of themselves, however, some mothers are unaware of their new role as a mother. Mother will become confused, while on the other hand, the baby needs proper treatment. Mothers who suffer from this situation are usually those who lack experience in baby caring.[18]A research that is not in line with this research is that was conducted by Sari in 2009 that found that there is no significant correlation between the numbers of children with postpartum depression.[6]

The research of Masruroh reveals the different result. Primapara mother is more likely to suffer from postpartum blues because, after the delivery, they will have to adapt and lead to stress.[19] Most of the primipara mother feel anxiety during postpartum because of their first experience of the childbirth. Another research, by Harinifound that multipara postpartum mother can also suffer from the depression.[20]

The research of Paramasatyafound that the percentage of the possibility of primipara postpartum mother can suffer from baby blues is 70%.[12] The baby blues syndrome occur mostly to primipara postpartum mother. The multipara postpartum mothers who suffer from baby blues are usually those who had previously the same record..[21]

This research found that there is a connection between the parity status of the mother with the occurrence of maternal depressive symptoms. The p-value that is lower than 0.05 indicates that there is a relation between the number of children with maternal depressive symptoms for the respondents. The higher the parity status of a mother, the bigger the potential of having maternal depressive symptoms, and on the other hand, the lower the parity status of a mother, the lower the possibility of suffering from maternal depressive symptoms.

The Connection between Education and Maternal Depressive Symptoms

This research finds that out of 8 respondents with low education, there is the figure of 25% (2 people) that is free from maternal depressive symptoms, while the other 75% (6 people) have maternal depressive symptoms. It also finds that out of 89 respondents with high education, there is the figure of 64% (57 people) that is free from maternal depressive symptoms, and 36% (32 people) of them have maternal depressive symptoms. Therefore, this study finds a significant connection between the educations of mother with the possibility of suffering from maternal depressive symptoms.

The above conclusion is supported by the p-value < 0.05 that implies a connection between the education of the mother with the case of maternal depressive symptoms. The research of Nasri et al. revealed the otherwise; the education of mother does not influence postpartum depression. They also found that most of the respondents that suffer postpartum depression had only primary and junior high school (SD and SMP).[13]

The higher the education of a mother, the lower the possibility of her suffering maternal depressive symptoms, and on the other hand, the lower the education of a mother, the higher the chance of her suffering maternal depressive symptoms. This situation can also mean good as well as bad for a mother. The low education of a mother makes her classified into maternal depressive symptoms. On the other hand, mothers with high education have more capability of coping with problems, leading to better treatment during pregnancy and better preparation for the delivery. Highly educated mothers are capable of providing better preparation for baby caring through access to information from various sources. The higher the education of a mother, the better informed she would be.

Soep states that the majority of mothers who suffer from postpartum depression are those with low education. Low education contributes to the psychological condition of pregnancy, pre-natal preparation, and baby care during postpartum. This condition is strongly connected to the awareness of mothers about the consequence of pregnancy and becoming a mother.[17]

Highly educated mothers have a lower risk of having maternal depressive symptoms. Stay-at-home mothers are more likely to have maternal depressive symptoms. The amount of house works affects the physical and physicological situation of a mother in dealing with her new role. This situation happens very likely because most of the stay-at-home mothers are coping with routines which leads to weariness. Postpartum depression can occur because of the drastic change in life, from being a busy working woman to a stay-at-home mother.[13]

A theory from Lubis (2010) suggests that postpartum mother have to re-manage their routines and re-order their daily activities, be it leaving aside some of them, to focus on baby care. Indeed, baby caring could be entrusted to experts or medical personnel. The problem with working postpartum mothers is their inability to manage their times or unlikeliness to re-order the pre-pregnant or pre-natal activities. Once a mother has a baby, a task work becomes even more demanding, a situation that mostly leads to postpartum depression.[22]

The Connection between Income and Maternal Depressive Symptoms

This study reveals that out of 47 respondents whose income is lower than Rp. 1,800,000, there is a figure of 53,2% (25 people) that is free from maternal depressive symptoms, and the other 46,8% (22 people) has the symptoms. Out of 50 respondents whose income is more than Rp. 1,800,000, there is a figure of 68% (34 people) that is free from maternal depressive symptoms, and that of 32% (16 people) is with the symptoms. This study reveals that there is no significant connection between the incomes of mothers with maternal depressive symptoms.

The research of Nasri et al. found the significant connection between income and postpartum depression. Furthermore, the research discloses that economic problem is the most significant factor with regards to the potential of postpartum depression. The majority of mothers with postpartum depression are those with low income. Therefore, the more revenue a family has, the less risk of postpartum depression would be.[13]

The research from Wahyuni et al. reveals that amongst mothers with personal income, there was only a figure of 9.1% that faces the depression, in contrast to stay-at-home mothers, that there is as high as 90.9% of the respondents are the sufferers of postpartum depression. Stay-at-home mothers have as 10.7 times as much risk of postpartum depression as working mothers.[23]

According to Endang, cited by Nasri et al., the occurrence of postpartum depression to low-income mother is related to the amount of cost needed for baby needs and baby care. The financial problem could be a factor leading to the stress of a mother in addition to pressure driven by the drastic change of their natural life for having a baby. On the other hand, the financial would not be a problem from mothers with high income, which means that they will have less stress. Therefore, income is a determining factor in the psychological state of a person; the more income one has, the less anxiety he gets, and another way around. This research, for that matter, does not support the theory suggesting that income affects the possibility of having maternal depressive symptoms for postpartum mothers.[13]

Concerning this matter, we assume that the ground for the negative figure shown by this result is that most of the respondents of this research are a civil servant with adequate or higher income.

V. Conclusion

Conclusion

1. The majority of respondents (60.8%) is free from maternal depressive symptoms.
2. Factors leading to the occurrence of maternal depressive symptoms are parity status and education, while factors that do not lead to the depression are age and income.

Suggestions

1. The daycare provider should conduct early detection on the occurrence of maternal depressive symptoms for mothers, starting from the pregnancy period, pre-natal phase, and postpartum as one of the necessary preventive actions for menaces of maternal depressive symptoms.
2. The government should provide facilities to provide more knowledge such as class session for pregnant women and postpartum mother, in which mothers can get adequate information about the physical and psychological change that they will encounter during pregnancy, labour, and postpartum. The necessary information also includes methods of avoiding and coping with a psychological disorder.

References

[1]. Ibrahim, F. Faktor-Faktor Yang Berhubungan Dengan Depresi Postpartum Di RSIA Pertiwi Makasar. Thesis, Fakultas Kesehatan Masyarakat Universitas Hasanuddin, Makassar, 2012.
[2]. Pearlstein, T.; Howard, M.; Salisbury, A.; Zkotnick, C. Postpartum Depression. *American Journal of Obstentric and Gynecologic2009* (4), 357–364.
[3]. Stuart, G. *Principles and Practice of Psychiatric Nursing*, 10th ed.; Elsevier Inc: Mosby, 2012.
[4]. Sadock, B.; Sadock, V. *Kaplan & Sadock's Synopsis of Psychiatry. Behavior Sciences. Clinical Psychiatry. Lippincott Williams & Wilkins*; 2015.
[5]. Rismintari, Y. Peran Kangaroo Mother Care Terhadap Skor Depresi Postpartum. Thesis, Minat Utama Maternal Perinatal, Program Studi Ilmu Kedokteran Klinik, Fakultas Kedokteran Universitas Gadjah Mada, Yogyakarta, 2012.
[6]. Sari, L. Sindroma Depresi Pasca Persalinan Di Rumah Sakit Umum Pusat Haji Adam Malik Medan. Thesis, Departemen Psikiatri Fakultas Kedokteran Univesritas Sumatera Utara, Medan, 2009.
[7]. Nguyen, T.; Pham, T. Postpartum Depression and Risk Factors among Viatnamese Women. *Hindawi BioMed Research International***2019**.
[8]. Gondo, H. Skrining Edinburgh Postnatal Depression Scale (EPDS) Pada Postpartum Blues. Tesis, Bagian Obstetri an Ginekologi Fakultas Kedokteran Universitas Wijaya Kusuma, Surabaya, 2011.
[9]. Fidora, I. Pengaruh Pemberian Pendidikan Kesehatan Individu Disertai Buku Panduan Terhadap Perubahan Maternal Depressive Symptoms Pada Ibu Postpartum. Tesis, Universitas Gadjah Mada, Yogyakarta, 2015.
[10]. Roswiyani. Postpartum Depression, 2010.
[11]. Prasetyo, T. Hubungan Antara Usia Ibu Dengan Kejadian Postpartum Blues Di RSUD Panembahan Senopati Bantul Yogyakarta. Bachelor Thesis, Sekolah Tinggi Ilmu Kesehatan Jendral Achmad Yani, Yogyakarta, 2015.
[12]. Paramasatya, I. Hubngan Antara Usia Dan Paritas Dengan Kejadian Baby Blues Syndrome. Bachelor Thesis, Program studi Pendidikan Dokter Fakultas Kedokteran Universitas Muhammadiyah Surakarta, Surakarta, 2018.
[13]. Nasri, Z.; Wibowo, A.; Ghozali, E. Faktor Determinan Depresi Postpartum Di Kabupaten Lombok Timur. *Buletin Penelitian Sistem Kesehatan***2017**, *20* (3), 89–95.
[14]. Prawirohardjo, S. *Ilmu Kebidanan*; PT. Bina Pustaka Sarwono Prawirohardjo: Jakarta, 2014.
[15]. Padila. *Buku Ajar Keperawatan Maternitas*; Nuha Medika: Yogyakarta, 2014.
[16]. Irawati, D.; Yuliani, F. Pengaruh Faktor Psikososial Terhadap Terjadinya Postpartum Blues Pada Ibu Nifas; Poltekkes Majapahit Mojokerto, 2013.
[17]. Soep. Pengaruh Intervensi Psikoedukasi Dalam Mengatasi Depresi Postpartum Di RSU Dr. Pringadi Medan. Thesis, Sekolah Pasca Sarjana Universitas sumatera Utara, Medan, 2009.
[18]. Bobak, I.; Lowdermilk, D.; Jansen, M.; Perry, S. *Buku Ajar Keperawatan Maternitas*, 4th ed.; Maria, Peter, Translators; EGC: Jakarta, 2005.
[19]. Masruroh. Hubungan Antara Paritas Ibu Dengan Kejadian Postpartum Blues. *Jurnal Eduhealth***2013**, *3* (2).
[20]. Harini. Hubungan Antara Dukungan Suami, Paritas, Dan Keikutsertaan KP-Ibu Dengan Kejadian Baby Blues Pada Ibu Pasca Melahirkan Di Wilayah Kerja Puskesmas Pajang Kota Surakarta. Bachelor Thesis, Universitas Muhammadiyah Surakarta, Surakarta, 2017.
[21]. Mansur, H. *Psikologi Ibu Dan Anak*; Salemba Medika: Jakarta, 2009.
[22]. Lubis, L. *Depresi Tinjauan Psikologis*, 1st ed.; Kencana: Jakarta, 2010.
[23]. Wahyuni, S.; Murwati; Supiati. Faktor Internal Dan Eksternal Yang Mempengaruhi Depresi Postpartum. *Jurnal Terpadu Ilmu Kesehatan***2014**, *3* (2), 106–214.

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