

## Conference Paper

# Contribution of the Amount of Pregnancy (Gravida) to Disease Related Pregnancy and Complications During Labor

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## Abstract

**Background:** Increasing maternal and neonatal mortality is still the most important health problem in the developing country like Indonesia. One of the causes of high maternal and infant mortality rates is the presence of mother and disease during pregnancy such as diabetes mellitus, pre-eclampsia, anemia, asthma, heart disease, infection, and hepatitis. The diseases of participants during pregnancy should not be immediately handled when copied, therefore can impact and threaten the safety of mothers and their infants. **Objectives:** This study aims to find the age of the mother with the diseases, the status of the gravida of the mother, the diseases of the woman, the type of delivery which was undertaken, and the status of the maternal graph with the highest participant disease. **Methods:** This research used descriptive with study design. Researchers took samples using a total sampling technique of 157 respondents who were taken from looking at the Medical Record (RM) data at PKU Muhammadiyah Klaten, in a central data processing technique. **Results:** The research shows that mothers 20-35-year high age presentation of 106 (67.5%). Gravida of the highest mothers was at multigravida (70.7%). Participants in the highest pregnant women were 128 (81.5%). Delivery of pregnant women with the highest participant disease through the 81(51.6%) sexist contribution of 81.6%. The contribution of mother's gravida to the highest gestational disease is in multigravida with pre-eclampsia 103 (92.7%). **Conclusions:** the pregnancy status of mothers contributes to the maternal and child health during pregnancy and childbirth.

**Keywords:** Disease, Gravida, Pregnancy

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## 1. Introduction

Emergency and neonatal pregnancy, is a condition that can threaten one's soul, and it can happen both during pregnancy and childbirth. Death incidents and maternal pain are still a very serious health problem in the developing countries. Based on the results

of the World Health Organization (WHO) report by 2017 the maternal mortality number (AKI) in the world is still high with a 289000 souls [1]. Several developing countries such as Sub-Saharan Africa with 179,000 people, South Asia with 69,000 people, and 16,000 in Southeast Asia. The AKI in the Southeast Asian Nations is one of them in Indonesia at 190 per 100,000 live births [1]. The fact that the maternal mortality rate in Indonesia during 2010-2013 was caused by bleeding in labor, in addition there were four main causes of the death of mother, fetus, and newborn baby (BBBL), it could be caused by hemorrhaging, hypertension, and precipitation or eclampsia, and a stall of the crash. According to the data from the Central Java Provincial Casga Program in 2016, explained that AKI illustrated the risks that mothers suffer from pregnancy in post-delivery which has been affected by several factors, including the nutritional status of mothers during pregnancy, a social conditions can also support an unfavorable health of mothers in prenatal care, the health conditions, the presence of complication during pregnancy and childbirth (hypertension, inflammation, and availability).

The higher maternal mortality rate is caused by the lack of adequate service facilities including prenatal and postnatal services and poor women's social status. According to 602 cases of maternal mortality in Central Java Province, which is equal to 109.65 per 100,000 live births with a percentage of 63.12% caused by death of a maternity time, 22.92% pregnant time and 13.95 at maternity time [2]. Researchers conducting research at PKU Muhammadiyah, were disturbed by the assistance of pregnant women and provided by participants in the 2007 medical treatment that was provided by the community and provided BPJS. From the outpost, the researchers were interested in conducting research on the contribution of gravida to pregnancy disease.

## 2. Methods

Method in this research was descriptive with restrospective study design. This research used secondary data, which is looking at the data from the medical records. The samples used were all pregnant mothers with pregnancy diseases and maternity at PKU Muhammadiyah Klaten were based on medical records from August 2017 to July 2018 by 157 respondents from 1,225 pregnant mothers.

Data was taken with a total sampling technique. A study was conducted at PKU Muhammadiyah Klaten Hospital in April 2019. Analysis of data was used in central analisa type, and distribution of frequencies to calculate the frequency of data and know the type of gravida in pregnant women with the highest participant disease.

### 3. Result

#### 3.1. Patient Characteristics

Characteristics of maternal age patients with diseases which frequently appear in 25-35 years of age, gravida of mothers with frequently occurring in 2 mode of multigravida, i.e. multigravida, diseases that often appear in first mode of precipitation, the type of childbirth that often emerges in mother with disease of passenger value 2, namely malignancy, sexual existence of sexual existence.

TABLE 1: Characteristics of respondent.

Characteristics	Frequency(n)	Percentage (%)
Age		
<20	5	3.2
20-35	106	67.5
>35	46	29.3
Gravida		
Primigravida	46	29.3
Multigravida	111	70.7
Disease		
Pre-eclampsia	128	81.5
Diabetes Mellitus	1	0.6
Heart Disease	0	0
TBC	0	0
Asthma	0	0
Anaemia	21	13.4
Hepatitis	7	4.5
Labor		
Spontaneous	76	48.4
Section Caesarea	81	51.6
Vacuum	0	0

Table 1 shows that of the 157 respondents in this study the highest impact of 20-35 years of age was 106 (67.5%). Then, 157 respondents in this study shows the highest maternal graph of multigravida by 111 (70.7%), while with 46 primigravida (29.3%). Pregnancy disease of the study samples at PKU Muhammadiyah Klaten in 2018 was 128 (81.5%), 21 (13.4%), and Hepatitis 7 (4.5%). That most of the samples at PKU Muhammadiyah Klaten Hospital in 2018 were carried out by SC handling of 81 (51.6%). The highest contribution to pregnancy disease was 111 samples of the highest gravida pregnancy with 103 presample diseases and 17% of the pregnancy certificates which were mostly owned by the sample.

## 4. Discussion

Based on Table 1 shows the age of the sample of pregnant women 20-35 years to 67.5%. She is less than 20 years of age and less than 5 with 3.2 percent of pregnancy and more than 35 years of age risk at 29.3%. The age of mother in pregnancy is a socio-demographic factor that can affect the pregnancy process [3]. More than 20 years of age and less than 35 years of age are what can be said to be the best age of pregnancy, because at that age the reproductive system of women can work at most [4].

Pregnancy at less than 20 years and more than 35 years is a high risk pregnancy that can have a variety of pregnancy problems, both psychological and physiological, because of womb and mother's pelvis and blood circulation have not developed perfectly and at the age of more than 35 years, mothers will experience a decrease in quality in egg, organ aging, and the existence of the mother's womb can decrease and preeclampsia, longstanding maternity diabetes, a birth with an operative area, and death, in addition to the downside of the fetus downwards, a child can be born with a lower birth weight, a macrosomia, a human disorder, and a neonatal mortality [5].

Research found that pregnant women with the most successful diseases of 20-35 years of age. The study was supported by 2015 research with a sample of 367 pregnant women, that the most pregnant woman with 20-35 years of age was 281, with a 20-35 years of age and the reproductive system of women could work well [6]. Another study also explains that pregnant years until 35 years are a very good, healthy reproductive age for a woman to get pregnant and give birth to a baby [7]. Nursal's 2016 study explained that the risk-aged group (55.9%), which means pregnant women aged <20 years and >35 years are at high risk for experiencing glamorous disease occurrences compared to age 20 to 35. This has happened because at age <20 and >35 years old mother has experienced an increase or a decline in reproductive system function [8].

Too young <20 years old mother's hip is not ready and grows perfectly to become pregnant and easily experience increased blood pressure and easy to experience convulsions. Age>35years or age is experiencing a decline in reproductive system as mothers age are sustained to disease as easily increased blood pressure. Pregnant mothers at a high risk of checks for antenatal care are very important to detect early detection, and prevent the possibility of suffering from accompanied disease during pregnancy [8]. Based on the results of a mothers age study that is still young and too old in pregnancy can increase the risk of chronic diseases such as DM, heart disease, hypertension, preeclampsia, and eclampsia due to the fact that the mother is a teenager

or old woman does not consume good nutrition, although the nutrients that the mother consumes are strongly affecting the fetus condition [9].

Most of the maternal samples in the most multigravida diseases of 70.7%, compared with 29.3% in the prime minister. The study supported by 2016 research that pregnant women with the most comp in multigravida than primigravida. It is because of the multigravida or pregnant mothers more than once that a mother has been exposed to contraception, different from the primigravida's pregnant mothers had never used contraception. The effects of a contraceptive use of one of them could increase blood pressure, it was necessary for the mother to follow the birth control counseling (Family Planning) to a health care facility, so that the mother could know and decide to use a contraception that was appropriate in managing pregnancy so that she could avoid the risk of getting pregnant komp replication [8].

Hasmawati's 2014 study explained that the pregnancy of the primigravida was very important for supervision to get information about the pregnancy and also prevent any signs of danger being prioritized in delivering antenatal care. An old primigravoda also needs supervision because in these conditions, it has become health reduction so that it can cause a blood vessel disorder [10]. Another study also found that mothers who have been receiving pregnancy komp applications are in mothers with 39 participants. Women who give birth more than 4 times or more can experience pregnancy comp such as anemia, young pregnancy bleeding, pre-empathy and early fracture [11].

The research is different from Suwanti's research, that the mother, with a second or more risky pregnancy, has been prenatal comp due to primigravians or primies, has been formed blocking antigen bodies to imperfect antigens, thereby inhibits the invasion of spiral artery, which may cause a secretion as the sterilized stimulation and secretion [12].

This is similar to Denantika research, primigravida is riskier to experience preeclampsia disease due to the first exposure to pregnant women can be exposed to vilus corion. Women are a mechanism for the formation of immunologic blocking from HLAG antibody to antigen placenta, which is improperly constructed so that can cause disruptions to the process of implantation of the trophoblasts to the desiccate tissue of the pregnant mothers [13].

Research resulted that it is known that the most pregnant bug in pregnancy is 81.5%, Anemia (13.4%), Hepatitis (4.5%), and lowest in DM (0.6%). High-risk pregnancy is a pregnancy that threatens both fetus' or mother's life. It requires a more comprehensive approach to high risk pregnancy, there is a category by threat on pregnancy health, such

as biofysics, psychosocial, sociodemographic, and the environment. Pregnancy publishing complications for childbirth can increase morbidity and mortality. Early detection of high-risk prevention issues pregnancy problems, childbirth and birth [5].

During pregnancy, it will undergo hormonal changes in circulation. The weight increase in mother's body and the extra tissue necessary for the fetus to grow in the womb. The blood pressure will drop in the first six months of pregnancy, this happened because of a drop in quantum vas resistance, which is caused by a subtle muscle stretch by progesterone hormone after 24 weeks of blood pressure will continue. The increase occurs as the zoom continues and the size of concepts. This condition will cause the absorption of oxygen in the blood to continue too much during pregnancy, when the blood flow to the placenta undergoes delay, the oxygen and nutrients that will be distributed to the fetus will decrease, thus slow the growth and development of the fetus, and increase the risk of delivery [16].

Preeclampsia could happen because it is influenced by some factors, namely the old mother age, because the old woman is going to be declining in her body's function with the degeneration process. The degeneration process on the mother reproductive system causes the body function to be disturbed so that it is easy to get pregnant with it. The work also affected preeclampsia because they had some difficult physical activity which could eventually cause stress and fatigue, so mother's blood pressure could increase. The primigravida mothers had great chances to experience an immunologic impact because they were immunologized when pregnant with the first blocking antigen forming bodies to the antigen and could lead to a low immunity response that could result in a preservation [17].

The majority of pregnant women in the form of deliveries were 81 persons, 51.6% of pregnant women and 78 people of whom were born with normal 48.4%. Someone's copy of an area is a children to take out the fetus through abdomen and sustained wall. The risk factor is done with a copy of the area, that is, the mother, the fetus or the placenta that covers the entrance. The mother factor to make copies of such areas as hypertension, preeclampsia, diabetes, HIV (Human Immunodeficiency Virus) with a virus greater than 1000, and a narrow mother's hip, whereas in the fetus such as disease, macrosomia infant, malposition and malpresentation. Most mothers over 35 years of age 30% give birth twice as much as teenage mothers [18].

Based on the results of analysis on chi-square research that respondents with a PEB (High Pre-eclampsia) have a greater chance of conducting serious sex-making transactions than respondent do. It is because of some fetal factors such as placenta previa, the uteri's threatening, longtime partus, crosia, and other indications, apart from

fetus', there were also mother factors that influenced sexual childbirth such as the existence of a PB [19]. The study was different from Hutagalung's 2016 research result, that the mother had the most abundant sexist in the mother that had no history of illness such as hypertension, uteri mioma, heart disease and candiloma acimuna infection. Madam, with the precipitation has to be carried out with the intention of minimizing the nonneonum asphany as the mother with protein and oedem can cause a shortage of oxygen and nutrition for the fetus [20].

Contributions to the number of pregnancies (Gravida) samples showing the greatest number of infectious diseases is in multigravida with pre-eclampsia pregnancy-related diseases. Based on the theory, pregnancy is more at risk of experiencing pre-eclampsia or pregnancy hypertension, this is due to the first time pregnant women undergo immunologic forming mechanisms i.e. antibody blocking of HLAG (Human pursuer antigen G) in the placental antigen, in which the antigen is not formed perfectly so that it can cause disruption of trofoblas implantation process to the desidual of pregnant women [21].

Besides antibodies that have not been formed perfectly, stress factors can also trigger a mother preeclampsia, because when the mother is stressed when faced with childbirth, it will lure the body to stimulate the hormone to secrete cortisol. One of the consequences is increased sympathal response, the work of cardiac bulk will increase and the occurrence of increased blood pressure [13].

## 5. Conclusion

In this study showed the characteristics of respondents, the presentation of the highest age of mothers age 20-35 years by 106 (67.5%). Gravida on the highest mother is in Multigravida or pregnant more than 1 time of 111 (70.7%). The most pretense of pregnant women is pre-eclampsia amounting to 128 (81.5%). The act of childbirth in pregnant women with the most numerous iiiiaccompanying diseases by sexist Act of 81 (51,6%). The contribution of the mother to the highest pregnancy-related diseases is a multigravida with a pre-eclampsia disease of 103 (92.7%).

## References

- [1] WHO. Maternal Mortality: World Health Organization; 2017.
- [2] Dinas Kesehatan Provinsi Jawa Tengah. (2017). Profil Kesehatan Provinsi Jawa Tengah Tahun 2016. Profil Kesehatan Provinsi Jawa Tengah Tahun 2016. 3511351

- (24), 47–83.
- [3] Johnson, Joice Y. (2016). Keperawatan Maternitas. Yogyakarta: Rapha Publishing.
- [4] Rohan, Hasdianah Hasan. (2017). Buku Kesehatan Reproduksi. Malang: Intimedia
- [5] Lowdermik, Deitra Leonard., Perry, Shannon E., and Cashion, Kitty. (2013). Keperawatan Maternitas Ed. 8. Penerjemah: Felicia S & Anesia T. Elsevier: Singapore.
- [6] Haryani, Ayu Putri., Maroef, Moch., & Adilla Sri N. (2015). Hubungan Usia Ibu Hamil Beresiko dengan Kejadian Preeklampsia/Eklampsia Di RSUD Haji Surabaya Periode 1 Januari 2013 – 31 Desember 2013. Volume 11 No 1 Juni 2015.
- [7] Triana, Ani. (2014). Pengaruh Penyakit Penyerta Kehamilan dan Kehamilan Ganda dengan Kejadian Bayi Berat Lahir Rendah di RSUD Arifin Achmad Provinsi Riau. *Jurnal Kesehatan Komunitas*, 2 (5)(4), 193–198.
- [8] Nursal, Dien Gusta Anggraini., Tamela, Pratiwi., & Fitriyani. (2016). Faktor Risiko Kejadian Preeklampsia pada Ibu Hamil di RSUP DR. M. Djamil Padang Tahun 2014. *Jurnal Kesehatan Masyarakat Andalas* p-ISSN 1978-3833 e-ISSN 2442-6725, 10 (1), 40-41.
- [9] Sutan, et al. (2014). Determinant of Low Birth Weight Infants: A Matched Case Control Study. *Open Journal of Preventive Medicine*, 4, 91-99. March, 2014.
- [10] Hasmawati, Dessy. (2014). Faktor-Faktor yang Berhubungan dengan Kejadian Preeklampsia pada Kehamilan di RSUD Embung Fatimah Kota Batam Tahun 2012. *Jurnal Kesehatan Andalas*, 2014 (3).
- [11] Ummah, F. (2015). Kontribusi Faktor Risiko 1 terhadap Komplikasi Kehamilan Di Rumah Sakit Muhammadiyah Surabaya. Website: <https://jurnal.stikesmuhla.ac.id/wpcontent/uploads/2018/04/6>.
- [12] Suwanti., Wibowo, Edi Prasetyo., & Safitri, Nur Aini. (2014). Hubungan Tekanan Darah dan Paritas dengan Kejadian Eklampsia di Ruang Bersalin RSUP NTB Tahun 2012. *Media Bina Ilmiah* ISSN No. 1978-3787, 8(1). Website: <http://www.lpsdimataram.com> Volume 8, N
- [13] Denantika, Oktaria., Serudji, Joserizal., & Revilla, Gusti. (2015). Hubungan Status Gravida dan Usia Ibu terhadap Kejadian Preeklampsia di RSUD Dr. M. Djamil Padang Tahun 2012-2013. *Jurnal Kesehatan Andalas*, 4(1), 215.
- [14] Murhananto. (2006). Dasar - Dasar Permainan Futsal. Yogyakarta: Kawan Pustaka
- [15] Muttaqin, Arif. (2008). Buku Ajar Asuhan Keperawatan Klien Dengan Gangguan Sistem Pernafasan. Jakarta: Salemba Medika
- [16] Jumaiza., Elvira, Deni., & Panjaitan, Arip Ambulan. (2018). Analisis Faktor-Faktor yang Berhubungan dengan Kejadian Hipertensi pada Ibu Hamil Trimester III. *Jurnal Ilmiah*

Ilmu Kesehatan: Wawasan Kesehatan, P-ISSN 2087-4995, E-ISSN 2598-4004, 4(2), 125–137.

- [17] Lombo, Giovanna E., Wagey, Freddy W., & Mamengko, Linda S. (2017). Karakteristik Ibu Hamil dengan Preeklampsia Di RSUP Prof Dr. R.D. Kandou Manado. *Jurnal Kedokteran Klinik (JKK)*, 1(3), 9–15.
- [18] Green, Carol Johnson and Wilkinson, Judith M. (2012). *Rencana Asuhan Keperawatan Maternal & Bayi Baru Lahir*. Jakarta: EGC
- [19] Aprina & Puri, Anita. (2016). Faktor-Faktor yang Berhubungan dengan Persalinan Sectio Caesarea di RSUD DR. H Abdul Moeloek Provinsi Lampung. *Jurnal Kesehatan*, 1(7). 92-93.
- [20] Hutagalung, Evita Sartika., Hiswani, & Rasmaliah. (2015). Karakteristik Ibu Bersalin dengan Seksio Sesarea Di Rumah Sakit Santa Elisabeth Medan Tahun 2013-2014. *Gizi, Kesehatan Reproduksi dan Epidemiologi*, 1(4).
- [21] Walyani, E. S. & Purwoastuti, Th. E. (2015). *Asuhan Kebidanan Kegawatdaruratan Maternal & Neonatal*. Yogyakarta: Pustaka Baru Press.