

The Trigger Factors of High Risk Teenage Pregnancy In Puskesmas (Public Health Center) Mojo Kediri Regency

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Abstract: *Pregnancy is a state of carrying a developing embryo or fetus within the women's body accompanied by physical and psychosocial changes due to the growth and development of the reproductive organs and the fetus. Teenage pregnancy (mother aged <16 years) has been associated with high maternal and infant mortality rates. Based on the SKDI (Indonesian Population Data Survey) in 2007, the number of early marriage cases in Indonesia reached 50 million people with an average age of marriage of 19.1 years. Involving all pregnant women (aged <20 years) in Mojo sub-district Kediri Regency and 31 respondents as samples, this study aimed to identify the factors of high risk teen pregnancy. Questionnaire was deployed and direct measurement of hemoglobin (Hb) level was recorded to collect the data which then were analyzed by Ordinal Regression to test the Hypothesis. The result of the research indicated that the trigger factors that influence the high risk teenage pregnancy were lack of knowledge, ante natal care, and Hb level. While the variables of anxiety, nutritional status and socioeconomic did not affect the occurrence of high risk teen pregnancy. Knowledge variable had the greatest influence in triggering high risk teen pregnancy. The results of this study is expected to be beneficial for Puskesmas officers for the purpose of intensive counseling and motivation to pregnant teenagers such as performing routine ANC examination and taking tablet Fe as recommended.*

Keywords: *Teenage Pregnancy, High Risk Pregnancy*

I. Introduction

Teenage pregnancy is commonly defined as pregnancy under the age of 19 years and is commonly unplanned, marriage-free, or due to early marriage. Although the mortality rate is low, the morbidity remains high even. The incidence of teenage pregnancy has declined since 1991. Teenage pregnancy is associated more with socioeconomic, psychology, and education factors than with the biological effect of age (Muscari & Mary, 2005). Based on the 2010 Indonesian Population Census teenagers aged 10-14 years amounted to 22.7 million and aged 15-24 years amounted to 40.75 million of the 237.6 million total populations. Data from 2009 National Census showed that married teenagers aged 15-19 were about 3% (female 5.4% and male 0.6%) while married adolescents aged 20-24 years were about 16.8% (female 25.2% and male 8.6%) (BPS, 2010).

Internal and external factors are believed to affect teen pregnancy that can cause problems, especially for the primigravida. Pregnancy is a state of carrying a developing embryo or fetus within the women's body accompanied by physical and psychosocial changes due to the growth and development of the reproductive organs and the fetus. Pregnant teenagers under the age of 16 years or after the age of 35 years have higher rates of maternal mortality and infant mortality than women aged 20 to 29 years, but those under the age of 16 years have the most complications.

Changes in teen sexual behavior leading to free sex pose some serious risks such as unintended teenage pregnancies, sexually transmitted diseases with increased pelvic inflammatory disease, infertility, and ectopic pregnancy. Unintended pregnancies have adverse and long term effects. Teens with unwanted pregnancies are likely to face physical and emotional problems such as disgrace due to marriage-free pregnancy, guilty feeling for abortion, and racing against time due to stages of pregnancy. The psychological and emotional effects vary from mild regret to serious complications such as depressions of conveying to parents, being isolated out of family, and being considered immoral concerning with the baby inside. They have sleepless nights and are perturbed all the time regarding the aftermaths of unplanned pregnancy (Manuaba et al., 2007).

World Health Organization (WHO) recorded 28 cases of abortion per 1,000 women every year. The number of abortion cases rose from 44% in 1995 to 49% in 2008. Approximately around the world 16 million teenagers under the age of 18 gave birth annually and another 3.2 million had unsafe abortions. In 2012 WHO also recorded unwanted teen pregnancy rate also increased to 4.8% occurred to teen aged 10 to 11 years. While pregnancy rate at the age of 15 to 19 was as much as 48.1%, especially at the age of 17 years. The 2008 survey in 33 provinces of Indonesia by BKKBN (the National Family Planning Coordinating Board) discovered higher percentage of teenagers between the junior high and high school in Indonesia who experienced early sexual activity especially in big cities from 45.54% in 2006 to 63%. The SKDI (Indonesian Population Data Survey) in 2007 found that one-third of all marriages in some areas were recorded by couples less than 16 years of age. The number of early marriage cases in Indonesia amounted to 50 million people with an average age of marriage of

19.1 years. The incidence of early marriage in East Java was 39.4%, South Kalimantan 35.5%, Jambi 30.6% and West Java 36%. Nationally, the first marriage of teens under the age of 15, 16-18, and 19 years or more was recorded at about 11.52%, 32.33%, and 56.15% respectively. The least percentage of early marriage under the age of 15 years was found in East Nusa Tenggara Province of about 2.19%, while the highest one was in South Kalimantan Province of about 16.78%.

Teen pregnancy is also associated with increased incidence of obstetric complications. Pregnancies under the age 20 years have a risk of frequent anemia, fetal growth disorders, miscarriage, prematurity, low birth weight (LBW), or labor impairment, all of which could be the indications to surgical intervention of labor, preeclampsia, ante-partum bleeding, postpartum leading to sub-involution uterine, puerperal infection, breastfeeding problems, low IQ infants (Manuaba et al., 2007). Obstetric complications during pregnancy include lack of nutrition, late growth, intrauterine growth retardation, placenta previa, fetal abnormalities, preterm labor, low birth weight, spontaneous abortion, and hyperemesis gravidarum. Complications during childbirth include old labor, childbirth with action, high labor trauma. Postpartum problems include uterine atony, Haemorrhagic Post Partum (HPP), placental retention / placenta rest, uterine sub-involution, susceptible puerperal infections (Manuaba et al 2004). Pregnancy complications attributed mostly to pregnant teenagers' lack of knowledge of nutrition which will result in shortage of various substances needed during fetal growth. As a result this may cause higher preterm birth, low birth weight and congenital defects.

Problem Formulation

What factors can trigger high-risk teenage pregnancy in Kediri Regency, East Java Province, Republic of Indonesia?

General Purpose

To identify the trigger factors of high risk teenage pregnancy in Kediri Regency, East Java Province, Republic of Indonesia?

Conceptual framework

The Trigger Factors of High Risk Pregnancy

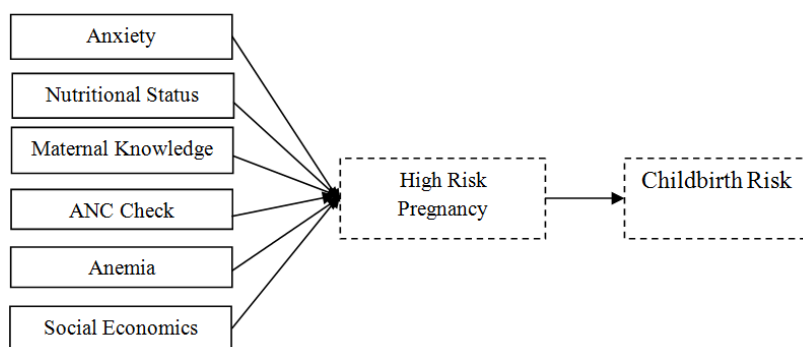


Figure (1) Research Conceptual Framework

II. Research Methods

Design

Cross sectional survey design was utilized in this study by which variable measurement was collected at one point of time.

Population and Sample

All pregnant women aged less than 20 years in Puskesmas Mojo Kediri Regency East Java, Republic of Indonesia were taken up as population. The inclusion criteria such as willing to be respondents and not experiencing mental disorders or other physical pain were used to get the samples.

Sampling Technique

Random sampling technique was administered to get 30 respondents.

Research Variables

1. Independent variable; Factors triggering high-risk pregnancy (X):
 - (X1) Anxiety: the psychological response of pregnant women because of concerns in pregnancy. Anxiety symptoms were measured by diagnostic and Statistical Manual of Mental Disorders (DSM-II)
 - (X2) Nutritional Status: the Body Mass Index (BMI) of pregnant women when the data was taken.

- (X3) Maternal Knowledge: the responses of pregnant women to questions related to high risk knowledge of pregnancy and its prevention.
 (X4) ANC Check: the frequency of checks performed by pregnant women in health facilities.
 (X5) Anemia: conditions in which a pregnant woman's Hb levels below normal (less than 11 gr%)
 (X6) Socio-economic: income in one family for one month.
2. Dependent variable; High Risk Pregnancy (Y): Measurement of the possibility of emergency state in pregnancy.

Research Hypothesis

1. There is an influence of anxiety on the occurrence of high risk pregnancy
2. There is an influence of nutritional Status on the occurrence of high risk pregnancy
3. There is an influence of maternal knowledge on the occurrence of high-risk pregnancy.
4. There is an influence of ante natal care on the occurrence of high-risk pregnancy.
5. There is an influence of anemia on the occurrence of high risk pregnancy.
6. There is an influence of socioeconomic on the occurrence of high-risk pregnancy.

Data Analysis

Ordinal Regression test was used to see what factors affect the high risk pregnancy and SPSS 19 software was used to process the data.

Ethical Issues

1. This research has received recommendation "Etical Clereance" from Health Research Ethics Commission, State Health Polytechnic of Malang, Republic of Indonesia.
2. Informed consent has been made to all respondents.
3. Maintain confidentiality of respondent's data.

III. Hasil

Table (1) Trigger Factors Of High Risk Pregnancy In Public Health Centre Mojo Kediri Regency

No.	Anxiety Level	X	%
1	Mild	26	87
2	Moderate	4	13
3	Severe	0	0
4	Panic	0	0
No.	Nutritional Status	x	%
1	Under Nutrition	4	14
2	Normal	13	43
3	Over Weight	13	43
4	Obesity	0	0
No.	Maternal Knowledge	x	%
1	Poor	9	30
2	Satisfactory	11	37
3	Good	10	33
4	Excellent	0	0
No.	Socio Economic	x	%
1	< Rp. 200.000,-	10	33
2	Rp. 200.000,- - < Rp.500.000,-	13	44
3	Rp. 500.000,- - < Rp. 1000.000,-	4	13
4	Rp. 1000.000,- -Rp. 1.500.000,-	3	10
No.	ANC Frequency	x	%
1	1 s/d 4 visits	8	27
2	5 s/d 8 visits	22	73
3	9 s/d 12 visits	0	0
No.	Hb Level	x	%
1	< 8 gr/dl	1	3
2	8 – 10 gr/dl	11	37
3	11-12 gr/dl	18	60
Total		30	100

Table (2) Characteristics of risk pregnancy in Public Health Centre Mojo Kediri Regency

No.	Pregnancy Risk	x	%
1	High Risk	13	43
2	Very High Risk	14	47
3	Referral	3	10
Total		30	100

Table 2 points out that most of the respondents were in very high risk pregnancies (47%), and 10% were referred to the hospitals for further medical intervention.

Table: (3) Regression Ordinal test results

Independent Variables	Estimation	Error Standard	Wald	Sig t
Anxiety Level (X ₁)	,846	1,769	,228	,633
Nutritional Status (X ₂)	-1,393	1,088	1,638	,201
Maternal Knowledge (X ₃)	-1,813	,837	4,694	,030*
Socio Economic Level (X ₄)	-1,055	,483	4,778	,029*
ANC Frequency (X ₅)	-1,741	,849	4,207	,040*
Hb Level (X ₆)	-7,446	5,347	1,939	,164

*Significans 5%

Ordinal Regression result is shown in Table 3. Three variables (Knowledge, Ante Natal Care, and Hb Level) were found to have p value of less than α (0.05).

IV. Discussion

The Influence of Anxiety on High Risk Teenage Pregnancy

Based on the results of regression analysis anxiety was not found as one of the trigger factors of high risk teenage pregnancy. Most pregnant teenagers experienced mild anxiety. It is believed that mild anxiety is a subjective experience which is advantageous to provide motivation and belief in the effort to maintain the balance of life especially during pregnancy (Suliswati, 2005). Mild anxiety in pregnant teenagers is also attributable to the prevailing traditions and cultures in the community. It is assumed that women should be married at a young age to immediately get a descent. Interestingly legally married pregnant teenagers are not subjected to a social taboo in this area. People consider teenage pregnancy is a natural thing; pregnancy is a gift that must be maintained and cared for properly. The cultural values and norms ultimately lead pregnant teenagers away from psychological pressure. Support and assistance from the environment such as husbands, families and communities contributes to pregnant teenagers' secured feeling regardless of its high-risk. Husband's support and assistance to his pregnant wife can reduce the anxiety (Diani, 2013). Socially supported pregnant teenagers will have positive belief acquired from their surroundings, so even if exposed to anxiety, they tend to be able to control it.

The Influence of Nutritional Status on High Risk Teenage Pregnancy

Nutrition plays very crucial role in maintaining the growth of fetus and the health of pregnant women. Adequate nutrition will assure the pregnancy to run normally, prevent fetal from death, and diminish other high risks of pregnancy (Mariyatul, 2012). The finding of this study demonstrated that most pregnant teenagers had normal to higher nutritional status based on IMT examination. Adolescents with growth ages tend to have more food intake because of their higher appetite. The 2007 Riskesdas (Survey on Public Health) showed that young women tended to have higher nutrient intake than young men. What should be cautioned is that teenagers are likely to enjoy eating snacks more than heavy meal. All day snacking is commonly found among them than three time meal a day habit. A lot of literature studies point out the cause of weight gain because of high calories, fat, sugar and low nutrient in snack foods (Atikah P & Erna K, 2010). They also contain lots of carbohydrate that causes gaining weight even faster (Aini, 2013). For this reason, in this study nutritional status in adolescents was not used as one of the indicators causing high risk pregnancy.

The Influence of Maternal Knowledge on High Risk Teenage Pregnancy

In this study maternal knowledge was found to contribute significantly to the high risk teenage pregnancy. The higher the women understand about high risk pregnancy, the lower the pregnancy risk will be. Pregnant teenagers with good understanding about high risk pregnancy will be able to determine the appropriate action to prevent, avoid, and overcome it. On the other hand, the lower the knowledge of risk pregnancy that the women have, the higher it will be. In that case, the pregnant teenagers do not realize that they are under the high risk of pregnancy. In conclusion, maternal knowledge must be taken into account in triggering the risk of pregnancy. (Damayanti & Nur, 2009) Level of Education was also found contributing to the high risk pregnancy.

This study illustrated that most pregnant teenagers had only primary education which influenced their ability to receive and understand information about high risk pregnancy. Those with low education had difficulty in recognizing the signs of high-risk pregnancy and had fewer ideas about proper attitude in preventing the high risk of pregnancy (Mubarak, et al., 2007). Another factor affecting the knowledge of high risk pregnancy was previous experience of carrying the pregnancy. The fact that one's experience is a source of knowledge for that person really works in the case of high risk pregnancy (Notoadmodjo, 2010). Poor antenatal care and illiteracy documented in other studies is also found in this study. Pregnant teenagers in this study were lack of experience in pregnancy and childbirth so their ability to take action to anticipate the high risk of pregnancy was relatively low.

The Influence of Ante Natal Care on High Risk Teenage Pregnancy

This study discovered that ante natal care affected the occurrence of high risk teenage pregnancy. If ante natal care does not meet the standard then it will increase the occurrence of high risk teenage pregnancy. Ante natal care is very important for pregnant women to know their status of risks in terms of maternal and infant mortality. Ante natal care aims to keep healthy throughout pregnancy and childbirth, to promote healthy born babies, to monitor possible pregnancy risks, to plan optimal management of high-risk pregnancies, and to reduce perinatal morbidity and mortality (Mufdillah, 2009). High risk teenage pregnancy can cause death to the mother and the baby. Being pregnant at a young age requires better ante natal care because pregnant teenagers have a high risk that threatens both the mother and the baby. Obstetric complications that can harm pregnant women include anemia, pregnancy induced hypertension (PIH), bleeding, eclampsia and infection. Administering ante natal care routinely and accordingly can prevent the occurrence of these conditions (Arsita, 2012). This study found some pregnant teenagers did not pay serious attention to ante natal checkups as required. Some factors playing a part in the low participation of antenatal checkups accordingly attributed to the lack of knowledge, low education, early age, economy, information sources, and geographical location. Less knowledge about the importance of ante natal care caused pregnant women did not check up their pregnancies regularly. The check up was only considered necessary when symptoms of pregnancy risks emerged not because of an awareness of the importance of routine pregnancy checks. In addition, young age could be a barrier to pregnancy checkups. Lack of knowledge and feelings of insecurity could also reduce the motivation of pregnant teenagers to check up their pregnancies.

The Influence of Hb Level on High Risk Teenage Pregnancy

This study uncovered the influence of Hb levels of pregnant women with high risk pregnancy. The lower the Hb levels of pregnant women, the higher the risk of pregnancy will be. Low Hb levels during pregnancy pose a threat to the health and safety of the mother and the fetus. Hemoglobin is a compound element composed of a simple protein called globin and a colorful prosthetic radical called heme. Hemoglobin serves to transport oxygen to be carried throughout the body's tissues. For pregnant women Hb is said to be normal if >11 gr/dl. Pregnant women with anemia have a greater risk of having a baby with Low Birth Weight (LBW), death during labor, difficult postpartum hemorrhage due to weakness and easily impaired health (Princess, 2014). The impact of Hb deficiency will cause oxygen to the tissue to be reduced including oxygen delivered to the fetus, causing disruption to the growth and development of the fetus. Pregnant women with oxygen deficiency will show symptoms of dizziness, weakness, pale skin, easily fainted, and pale. The main cause of anemia in pregnant women is iron deficiency (Abdul Muthalib, 2010). Therefore, pregnant women need to consume nutritious foods and iron supplement, as much as 60 mg / day. Pregnant teenagers tend to be less willing to consume Fe due to lack of knowledge about the need for iron during pregnancy. In addition, the eating habit with less iron intake will also affect the occurrence of anemia. Moreover, pregnant teenagers prefer to consume food which is rich in carbohydrates and fat like fries, rice, and fast food. Their understanding due to their low education and lack of knowledge about the importance of Fe to prevent anemia created another problem. Less attention of ANC checkups increases the risk of anemia during pregnancy.

The Influence of Socio-Economic Influence on High Risk Teenage Pregnancy

Socioeconomic conditions interestingly did not affect the occurrence of high risk of pregnancy in this study. Regardless of the low income, it did not trigger the high risk of pregnancy. Even though most of the pregnant teenagers came from the low income family, the culture which upholds the value of kinship bound all family members and relatives to bear the needs of the pregnant women. Culture of gotong royong (mutual cooperation) was still well preserved and committed by the community. For that reason, pregnant women got the attention and help from their surroundings by which the occurrence of high risk pregnancy would potentially be decreased.

V. Conclusion

Conclusion

1. Anxiety experienced by pregnant teenagers did not affect the occurrence of high risk teenage pregnancy.
2. Nutritional status of pregnant teenagers did not affect the occurrence of high risk teenage pregnancy.
3. Maternal knowledge positively affected the high risk teenage pregnancy.
4. Ante natal care affected the high risk teenage pregnancy.
5. Hb level affected the high risk teenage pregnancy.
6. Socioeconomic conditions did not affect the occurrence of high risk teenage pregnancy.
7. Maternal knowledge had the greatest influence in triggering high risk teenage pregnancy.

VI. Recommendations

1. For pregnant teenagers
 - a. It is recommended that pregnant teenagers to consume nutritious foods, especially those that contain lots of iron by utilizing the source of food around them and is expected to consume Fe supplement all the times as recommended.
 - b. It is expected that pregnant teenagers to checkup antenatal all the times as required.
 - c. It is expected that pregnant teenagers to follow the extension activities related high risk pregnancy prevention conducted by health officers.
2. For Public Health Centre Mojo Kediri Regency

It is expected that Public Health Centre officers to provide assistance to high risk pregnant teenagers by involving the active participation of cadres in accordance with the Gebrak program (Movement of Safe Pregnancy and Childbirth) launched in Kediri Regency. In addition, Public Health Centre officers are expected to motivate parents to set up their children marriage as regulated by government to prevent the high risk pregnancy.

References

- [1] Aini, S. N. (2013). Faktor Resiko yang berhubungan dengan kejadian gizi lebih pada remaja di perkotaan *Unnes Journal of Public Health*, 1-5.
- [2] Arsita, E. (2012). *Kesehatan Ibu dan Anak*. Yogyakarta: Nuha Medika.
- [3] Atikah P, & Erna K. (2010). *Ilmu Gizi untuk Keperawatan dan Gizi Kesehatan*. Yogyakarta: Nuha Medika.
- [4] Bahiyatun. (2011). *Psikologi Ibu dan Anak: Buku Ajar Bidan*. Jakarta: EGC
- [5] Damayanti, & Nur. (2009). *Hubungan tingkat pengetahuan ibu hamil tentang resiko tinggi kehamilan dengan kepatuhan kunjungan ANC di RSUD Pandan Arang Boyolali*. Surakarta: Fakultas Ilmu Kesehatan Universitas Muhammadiyah Surakarta.
- [6] Dariyo, A. (2008). *Psikologi Perkembangan Dewasa Muda*. Jakarta: Grasindo
- [7] Donna L, Wong. (2008). *Buku Ajar Keperawatan Pediatrik*. Jakarta: EGC
- [8] Effendi, Ferry dan Makhfudi. (2009). *Keperawatan Kesehatan Komunitas: Teori dan Praktik dalam Keperawatan*. Jakarta: Salemba Medika
- [9] Henderson, C. dan Jones Kathlen. (2006). *Buku Ajar Konsep Kebidanan*. Jakarta: EGC
- [10] Hidayat, Aziz A.A. (2007). *Metode Penelitian dan Teknik Analisa Data*. Jakarta: Salemba Medika
- [11] Hidayati, Ratna. (2009). *Asuhan Keperawatan pada Kehamilan Fisiologis dan Patologis*. Jakarta: Salemba Medika
- [12] Latifah, L. (2009). *Hubungan Kehamilan pada Usia Remaja dengan Kejadian Prematuritas, Berat Bayi Lahir Rendah dan Asfiksia di RS Margono Soekarjo Purwokerto*. <http://hubungan%20kehamilan%20pada%20usia%20remaja-3.pdf>. Diakses tanggal 10/12/2013 pukul 18:30.
- [13] Manuaba, IBG. (2004) *Penuntun Kepaniteran klinik Obstetri dan Ginekologi*. Jakarta: EGC
- [14] Manuaba, IBG et al. (2007) *Pengantar Kuliah Obstetri*. Jakarta: EGC
- [15] Manuaba, IBG. (2010). *Ilmu Kebidanan, Penyakit Kandungan & Keluarga Berencana Untuk Pendidikan Bidan*. Jakarta : EGC
- [16] Meiliya, Eny dan Esty Wahyuningsih. (2009). *Buku Saku Kebidanan*. Jakarta: EGC
- [17] Mubarak, et al. (2007). *Promosi Kesehatan Sebuah Pengantar Proses Belajar Mengajar Dalam Pendidikan* . Yogyakarta: Graha Ilmu.
- [18] Mufdillah. (2009). *Antenatal Care Focused*. Yogyakarta: Nuha Offset.
- [19] Muscari, M. E. (2005). *Panduan Belajar: Keperawatan Pediatrik*. Jakarta: EGC
- [20] Notoadmodjo, S. (2010). *Pendidikan dan Ilmu Perilaku Kesehatan*. Jakarta: Rineka Cipta.
- [21] Notoadmojo, S. (2007). *Kesehatan Masyarakat: Ilmu dan Seni*. Jakarta: Rineka Cipta
- [22] Notoadmojo, S. (2010). *Metodologi Penelitian Kesehatan*. Jakarta: Rineka Cipta
- [23] Nursalam (2008). *Konsep dan Penerapan Metodologi Penelitian Ilmu Keperawatan*. Jakarta: Salemba Medika
- [24] Prawirohardjo, S. (2009) *Ilmu Kebidanan*. Jakarta : Yayasan Bina Pustaka Sarwono Prawirohardjo
- [25] Prawirohardjo, S. (2010) *Buku Acuan Nasional Pelayanan Kesehatan Maternal dan Neonatal*. Jakarta : Yayasan Bina Pustaka Sarwono Prawirohardjo
- [26] Putri, U. R. (2014). *Hubungan antara Kadar Hemoglobin Ibu Hamil pada Trimester Ketiga dengan Antropometri Bayi Baru Lahir di RSPAD Gatot Soebroto Dikesad 2014*. Jakarta: UIN Syarif Hidayatullah .
- [27] Ramaiah, S. (2003). *Keceemasan, Bagaimana Mengatasi penyebabnya*. Jakarta: Pustaka Populer Obor
- [28] Salmah et al. (2006). *Asuhan Kebidanan Antenatal*. Jakarta: EGC
- [29] Saminem. (2008). *Kehamilan Normal*. Jakarta: EGC
- [30] Semiun, Y. (2006). *Teori Kepribadian dan Teori Psikoanalitik FREUD*. Yogyakarta : Kanisius
- [31] Sriastuti, E. dan Resminingsih. (2010). *Bahan Dasar untuk Pelayanan Konseling Pada Satuan Pendidikan Menengah Jilid I*. Yogyakarta: Grasindo
- [32] Sugiyono. (2012). *Statistika untuk Penelitian*. Bandung: Alfabeta
- [33] Sujianti dan Dhamayanti, A.C. (2012). *Buku Ajar Psikologi Kebidanan*. Jakarta: CV. Trans Info Media

- [34] Suryani, E. dan Hesty W. (2010). *Psikologi Ibu dan Anak*. Yogyakarta: Fitramaya
- [35] Susanti, E. (2013). *Pengaruh Usia Ibu Hamil Terhadap Kecemasan Ibu di Bidan Rina Desa Pungejurong Kecamatan Meuraxa Banda Aceh*. <http://evi-susanti-jurnal.pdf>. Diakses tanggal 18/12/2013 pukul 19:00.
- [36] Utami, A. (2009). *Perbedaan Tingkat Kecemasan Primigravida dengan Multigravida Dalam Menghadapi Kehamilan di RSUD Arifin Pekanbaru*. <http://643-1274-1-SM-PDF>. Diakses tanggal 7/12/2013 pukul 15:35.