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Impacts of Violence during Pregnancy-Post Childbirth to Reproductive Health of Women at Rural and Urban Areas

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Abstract

This study aims to analyze the impacts of violence during pregnancy – post childbirth to reproductive health problems. The study was conducted in Sunju Village (Rural Area) and Tanjung Batu Village (Urban Area), Donggala Regency, Central Sulawesi, Indonesia. The number of respondents in this study was 94 people who were having violent experiences and they consisted of all married women of childbearing age, pregnant, and at post-childbirth. This study also included those people who have had those experiences in the past two years. The data were collected through structured interviews, in-depth interviews, and observation of moderate participation, focus group discussion, and documentation. The results indicate that violence during pregnancy post childbirth both in urban and rural areas has an impact on reproductive health problems. The impact can be non-fatal and fatal. The non-fatal effects include complication of pregnancy, unwanted pregnancy, sexually transmitted diseases (STDs), unsafe abortion, and premature birth/low birth Wight. Meanwhile, the fatal effects include maternal mortality and infant mortality. The occurrence of the fatal effects (maternal and infant mortality) can be caused by the non-fatal effects (unsafe abortion, complication of pregnancy, and premature birth). To conclude, violence during pregnancy – post childbirth causes fatal effects through the process of non-fatal effects at the urban and rural areas.

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1. Introduction

Violent husband to his wife during pregnancy and post childbirth period is a serious problem encountered by women. Annually, the form and the quality of the violence is getting complex and the cases are increasing. Consequently, the violence during that period has a serious impact to mother and child's health [1,2]. It found that around 6 to 15 percent of women has got an experience of sexual and physical violence from their husband during pregnancy, and of the mothers has been violated in their lives.

Furthermore, [3,4] argue that one of the four women during their pregnancy has got sexual and physical violence from their husband with different estimation. For example, in the United States it is estimated that the violence to pregnant women was around 3 to 11 percent and the adolescence was around 33 percent. Gender-related violence has been connected with different problems of a serious reproductive health which affects both the women and their children. Violence could have immediate effects such as problem on the womb, bad post childbirth, and sexually transmitted diseases. Violence during pregnancy also has long-term effect which brings about risk for women to get infected with diseases in the future, including maternal and infant mortality [5,6].

Some researchers have also studied the effect of violent husband to woman reproductive health. Research in [7] found that wound is not the most serious effect of gender-related violence, but it is more to reproductive functional problems. The woman who gets violated tends to have whitish, womb disease, and sexually transmitted diseases, including chronic pelvic pain. Study from [8] found that violent husband to his wife has bad effect to woman reproductive health. Some physical problems due to physical and sexual violence include whitish, pain on the lower stomach, weight loss during pregnancy, lack of chronic energy. The women violated physically and sexually by their husbands get double spontaneous miss birth, premature childbirth, and low weight of childbirth compared with those who are not violated.

In Central Sulawesi, the data from the Provincial Office of Police during the period of 2010 – 2012 indicate that the highest rate of violence to women has been occurred in Palu City with 86 cases, Donggala Regency with 78 cases, and other regencies with 50 – 65 cases. In Donggala Regency, the violence in 2012 – 2014 has increased to 80 cases (Public Relation Section of Polda Sulteng, Mei 2014). The prevalence of violence to pregnant women taken from the General Hospital of Donggala shows that there were 14 cases in 2010 – 2012 and this has increased to 27 cases in 2012 – 2014. It is estimated that there has been more not detected because not all midwives or health staff particularly in villages have got initial screening on the pregnant women and they understand that violence refers to physical violence only (Section of KIA RSU Donggala). The data above indicate that pregnant women have got violence. This raises a fundamental question "what is the effect of violence during pregnancy and post-childbirth to the woman reproductive health?" This research aimed at analyzing the effect of violence during pregnancy and post-childbirth to the woman reproductive health in Donggala Regency, Central Sulawesi.

Finding in [9] elaborated that reproductive health consists of two important elements: healthy sex and healthy reproduction. Sexual state is healthy if the following things are presented:

- a) Individuals are free or under control from possibility to get STDs due to sexual relations.
- b) Individuals are free or under control from dangerous practices and sexual violence.
- c) Individuals could control one's sexual access to him/her.
- d) Individuals could enjoy sexual pleasure and satisfaction.
- e) Individual could have an access of information on sexuality.

Furthermore, individuals are free from reproductive problems if they:

- a) are safe from possibility to get unwanted pregnancy.
- b) are under control from dangerous reproduction practices such as risk abortion and complicated pregnancy,
- c) are free to choose suitable contraception,
- d) have an access to information on contraception and reproduction,
- e) have an access to pregnancy care and safe childbirth care,
- f) have an access to treatment for impotence.

On the conference relating to population and development in Kairo, 1994, reproductive health is defined as the condition of comprehensively physical, mental, social welfare, free from disease or concern from anything related to its functions and processes. This means that humans have the capability of reproduction, women are able to pass through pregnancy period and post-childbirth safely, reproduction has positive effect, and baby could grow well. This definition implies that humans are able to control their fertility without getting risk of health problems and enjoy sex safely [10,11].

The effect of violence to woman health can be described in [12]. This elaborates the consequence of the three types of violence: couple violence, sexual violence, and violence to children. These three types of violence are likely to bring about physical health matters, soul, negative attitudes, serious conditions and serious and good health reproduction as shown in Figure 1.

2. Material and Method

This research was conducted in Sunju Village (rural area) and Tanjunbg Batu (urban area), Donggala Regency, Central Sulawesi. The sample was all the married women who are pregnant, have post childbirth, were pregnant, gave birth at most 2 years ago, and were violated at the time. They were 94 respondents. The data were collected through interview, focus group discussion, and moderate observation.

3. Result and Discussion

3.1 The Effect of Non-Fatal Violence to Reproductive Health

Based on the respondents' perceptions, this research reveals some effects which are Non-Fatal. They are complication of pregnancy (fever, pain before the ninth month, serious bleeding, convulsions, hypertension), unwanted pregnancy, sexually transmitted disease (STDs), premature childbirth, childbirth lower weight, unsafe abortion, and frigid. Each effect is presented in Table 1.

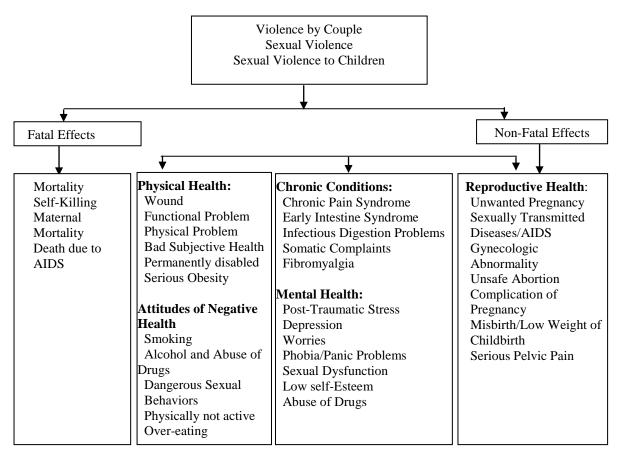


Figure 1: The effect of violence to woman health [12].

Table 1: The Effects of Non-Fatal Reproductive Health Caused by Violent Husband to His Wife during Pregnancy-Post Childbirth in Sunju and Tanjung Batu

| | | Sunju | | Tanjung Batu | | Total | |
|----|------------------------------------|-------|-------|--------------|-------|-------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| No | Non-Fatal Effects | | | | | | |
| 1 | Complication of Pregnancy | 17 | 47.2 | 10 | 27.0 | 27 | 36.9 |
| 2. | Unwanted Pregnancy | 8 | 22.2 | 14 | 37.9 | 22 | 30.1 |
| 3. | Sexually Transmitted Diseases | 1 | 2.8 | 2 | 5.3 | 3 | 4.2 |
| 4. | Unsafe Abortion | 1 | 2.8 | 2 | 5.3 | 3 | 4.2 |
| - | Premature Childbirth/Low Weight of | | | | | | |
| | Childbirth (BBLR) | | | | | | |
| 5. | | 4 | 11.1 | 2 | 5.3 | 6 | 8.2 |
| | Total | 36 | 100.0 | 37 | 100.0 | 73 | 100.0 |

In order to see the effect of violence to woman reproductive health, we need to analyze one by one and the process of the effect (anamneses) to the pregnant-post childbirth women.

3.1.1 Complication of Pregnancy

Complication of pregnancy refers to SDKI (2012). In SDKI, the symptom of complication of pregnancy is pain before the ninth month, convulsions, breech, serious bleeding, edema, hypertension, and dizzy. It is seen in Table 1 that the complication of pregnancy is 36.9 percent. The complication of pregnancy in this study is pain before the ninth month, convulsions, breech, serious bleeding, edema, hypertension, and dizzy. This is the experience of the victim. There is immediate effect as the complication of pregnancy caused by violence, but some take time. The kinds of complication are dependent upon the form and the quality of violence. Physical violence such as kicking on the stomach and hitting with sharp tools generally causes immediate complication of pregnancy. Neni, 26 years old, got this experience in Tanjung Batu.

My pregnancy at the time came to the ninth month. The story started when my husband just came home from work (fisherman). He would like to make love immediately. But it was early morning. I prepared children to go to school. Because he was not patient waiting in the bedroom, he twisted my hair and then kicked my stomach. Already, I fell down and got unconscious. I got serious bleeding and felt fever at the time. I was taken to the midwife's house for help. And finally, I gave birth prematurely.

From these women's experience above, it reveals that violence during pregnancy and post childbirth causes immediate and indirect complication of pregnancy. This finding is confirmed in [13,14] study on the violent husbands during pregnancy to the women in Thailand. The study shows that women who get violated during pregnancy is 13.1% and sexual violence is 4.8%, and of 475 pregnant women under the study, physical violence is 4.8%. Violence during pregnancy significantly affects unwanted pregnancy, complication of pregnancy to an increase of depression symptom, premature childbirth/low weight of childbirth, inadequate care of prechildbirth, sexually transmitted diseases, and maternal mortality. Researches [7,15] found that violence to wife causes not only complication of pregnancy, but also abuse of the rights for sexuality and woman's healthy reproduction.

In cities, married women who get complication of pregnancy are less, 27.0 percent compared with in villages, 47.2 percent. This indicates that the awareness of the importance of early pregnancy care is higher in the cities. This is reasonable because they are more knowledgeable that it is worth being well-informed. [16] found that complication of pregnancy in the cities is lower. The women have good access to information, particularly on pregnancy matters.

3.1.2 Unwanted Pregnancy

Unwanted pregnancy refers to the pregnancy due to a specific cause. It is not wanted by one of the couple. The unwanted pregnancy is caused by incomplete information and knowledge on the occurrence of pregnancy and the method of avoiding pregnancy due to raping in the marriage and the failure of contraception [17]. Table 1 reveals that violence to women during pregnancy and post childbirth due to unwanted pregnancy is 30.1 percent. The data indicate that unwanted pregnancy occurs because a couple forbids his wife to use contraception. Maspa, 25 years old, in Sunju said that "actually Madam, I do not want to be pregnant any longer, but my

husband asked me not to use a contraception, yah I get pregnant. Susi, 32 years old, in Tanjung Batu also said that I am relatively old Madam ... so it is not good any longer to give birth, but my husband forbade me to use contraception. If I use spiral, I was accused of doing negative things.

The two experiences above indicate that unwanted pregnancy occurs due to sexual violence. Its process tends to takes time. When their husbands forbid them to use contraception during the post childbirth, the women got pregnant after the post childbirth period. This finding implies that violent husband during pregnancy and post childbirth has caused an unwanted pregnancy. This conclusion is in line with finding [18] that the lack of husband's participation to the women whose contraception is not fulfilled is caused by the position of husband to take family decision has been dominant. This condition is relatively the same as in Latin America where husbands ignore family planning because of the value of *machismo*, that is, the value is in their manliness and husbands should dominate a family decision. Heise also reveals that the effect of violence to the problem of reproductive health includes Non-Fatal effect (unwanted pregnancy, complication of pregnancy, unsafe abortion, misbirth / low weight of childbirth, sexually transmitted diseases, gynecologic abnormality, and chronic pelvic pain.

It seems that unwanted pregnancy occurs more with married women in urban areas rather than in rural areas. The high rate of unwanted pregnancy in the urban areas is likely to occur due to the management of working time. The dilemma between committing to production which is identical with earning money and to keeping housewife work encourages them not to get pregnant any longer [17]. This view implies that the difference of the married women's social economic condition such as participation in job opportunity, their husband's job, their educational background living in rural and urban areas encourages them to have different fulfillment of contraception. This brings about different occurrence of unwanted pregnancy. This result strengthens the analysis of SDKI 2007 and 2012 which shows that women in urban areas tend not to have more children compared with those in rural areas. The willingness not have more children by the women in urban areas has grown in line with the increase of their educational qualification.

3.1.3 Sexually Transmitted Diseases

Sexual diseases refer to the diseases whose transmission is through sexual relations. According to [19], in the past sexual disease was termed venereal disease. However, such a disease has developed due to sexual relations, this sexual disease is now termed as sexually transmitted diseases (STD). These sexual diseases include syphilis, gonorrhea, harvest simplex, AIDS, and so forth. It has been found that the sexually transmitted disease that the victims got is gonorrhea. There were 3 cases. One was found in Sunju and the other two was in Tanjung Batu. The clinical signs are some pain on the back, liquid whitish like pus, painful when urinate, swollen, the front part of the vagina looks reddish. However, this disease is easy to cure. All these wives suffering from this sexual disease are due to sexual violence. This is in line with [20] finding that wound is not the serious effect of gender-related violence, but the effect is more on the problem of the functional reproduction. The women who get violated suffer from whitish, womb disease, and sexually transmitted diseases, including chronic pelvic pain. [3, 8, 21] argue that powerlessness of women in the sexual relations with their husband leads them to easily get sexual diseases.

There have been more sexually transmitted diseases in urban areas than in rural areas. The process and the motive are different. In villages, the wives of those suffering from sexually transmitted diseases sometime do not understand when they firstly get infected. They do not believe that their husband get connected with commercial sex women (prostitute). Jm, 28 years old, in Sunju said that she suffered from gonorrhea because her husband got sexual relation with a prostitute in Palu. Here is her experience.

"My husband is a construction worker. Every day, he goes to and comes back from Palu. At the beginning, I did not know. Later I heard from his friends that my husband used to go to the prostitution area of Tondo. I asked him and told me that he went there twice. Actually, I would like to use condom, but my husband forbade that. Yeah, I get infected with this kind of disease, but this is embarrassing Madam..." Im further said that sexual violence committed by her husband has caused sexually transmitted disease, but they did not understand the initial sign. Within these two months, I felt itchy, red, and swollen. Then, we went to the midwife in the village. It remains that sexual violence suffered by married women is not immediately realized at the time, but it takes time.

In urban areas, based on the two cases found, the two women's husband is fisherman. They tend to be more ready with the risk of sexually transmitted diseases. They said that when their husband go to fish for two months to even four months, their husband often gets sexual relations with other women as expressed by Dika in Tanjung Batu. "Said that fisherman on the ship seems normal. If they would like to have it, they can have sexual relations in Surabaya or Balikpapan."

What the married women in Tanjung Batu expressed above seems to be justified because Tanjung Batu is the centre of Donggala Port and fish trade. Because their husband works there, they tend to get infected with sexually transmitted diseases. Some fishermen or sailors from Donggala are well-known with this slogan "where the boat anchors is there they have a wife". They describe that fishermen have sexual attitudes which are digressing and they are not often loyal to their couple. This kind of attitude often causes the presence of sexually transmitted disease (STDs) to their wife. This confirmed in [22] work that the difference of geographical environment and long sustained routines which have shaped the character of the society has affected behaviors and different husband-wife relation pattern.

3.2 Fatal Effect

The fatal effects in this research include maternal death and death as shown in Table 2.

3.2.1 Maternal Mortality and Infant Mortality

Violence experienced by mother during pregnancy and post childbirth can result in mother death and her baby. The research data indicate that the number of death cases of mother is 2 and of baby are 3 cases. Although the cases are rare, the story is grieving and this occurs. Research [23] confirms that violent husband to his wife when giving birth can result in complication of baby delivery and even mother death and her baby. According to [3], the couple violence can bring about mother death.

Table 2: The Fatal Effect of Reproduction Health of Women due to Violent Husbands upon Them during Pregnancy and Post Childbirth in Sunju and Tanjung Batu

| | | Sunju | | Tanjung Batu | | Total | |
|----|--------------------|-------|-------|--------------|-------|-------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| No | Fatal Effects | | | | | | |
| 1. | Maternal Mortality | 1 | 33.3 | 1 | 50.0 | 2 | 40.0 |
| 2. | Infant Mortality | 2 | 66.7 | 1 | 50.0 | 3 | 60.0 |
| | Total | 3 | 100.0 | 2 | 100.0 | 5 | 100.0 |

The relationship between violence and mother death (Yati) in Tanjung Batu is an unsafe abortion. N in Sunju also felt this when she was about to give birth. The violence when is about to give birth results in complication of pregnancy bringing to death. This fact teaches us that the presence of husband beside his wife who is struggling for a new baby is crucial to create the feeling of safe and comfortable. The process of giving birth taking 8-12 hours requires patience, physical energy, and mental support. Husband support is likely to make wife feel safe and quiet. Reference [18] argues that when mother feels stressful, the balance of hormone and energy needed for easing the process of giving birth can be disturbed and the effect could be fatal, maternal and infant mortality. The violence during pregnancy and post childbirth might also result in infant mortality. Mila, 32 years old in Sunju narrated in the following. Initially, I did not want to have more children Madam..My husband also forbade me to have contraception. After the three months, I just realized that I was pregnant. I went to Ina for massage. Ina said you might be pregnant Nak. Please, test it first. I went to see the midwife. She said I get pregnant. I tried to have early pineapple, pill, but it does not go out. Later, I gave birth, e premature and abnormal, only one day Madam...the infant stayed and then passed away.

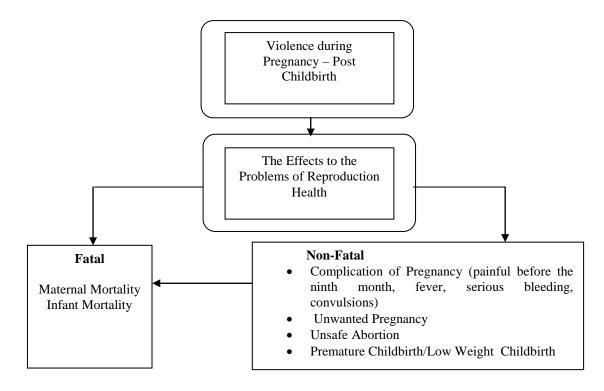


Figure 2: The Effect of Violence during Pregnancy and Post Childbirth to Wife Reproductive Health

In relation to the data above, it shows that the cases of mother death and baby death do not occur independently and immediately. In other words, the violence at the time did not directly cause wife death, but it takes morbidities process. Maternal and baby death goes through the process of not fatal effect (unsafe abortion, complication of pregnancy, and premature childbirth) to fatal. We could argue that there is a relationship and interconnection between not fatal and fatal. This research finding criticizes the Heise's theory analyzing the effect of not fatal and fatal. Each occurs independently and there is no connection to one another. The relationship is presented in Figure 2.

Cumulatively, this research stresses that the case of mother and baby death in the rural areas is higher, 8.3 percent than in the urban areas, 3.4 percent. This occurs due to the difference of social-economic status and health facility which is situated in cities. Reference [24] argues that the difference of social-economic background and health facility results in the difference in mortality pattern between cities and villages. Provincial Office of Social Department, Central Sulawesi in 2006 also indicates that the health facility in the cities is likely to reduce the number of mother and baby death. Consequently, the higher cases of mother and baby death are connected with the lower condition of care for pregnancy health. The quality care for pregnancy health should be supported by good health facilities.

4. Conclusions and Recommendations

The violence of husband to his wife during pregnancy and post childbirth affects the reproduction health both in the rural and urban areas. The effects are not fatal and fatal. The not fatal effects include the complication of pregnancy, sexually transmitted diseases (PMS), unwanted pregnancy, unsafe abortion, premature childbirth or low weight of childbirth, the loss of sexual libido (frigidities). The fatal effects are maternal and baby death. The fatal effects (maternal and baby death) go through the process of not fatal effects (unsafe abortion, the complication of pregnancy, and premature childbirth). Therefore, the not fatal and the fatal effects are connected and interrelated, not independently occurs. This conclusion confirms the research on violence effect model developed by Heise who argues that the couple violence is likely to result in the women reproduction health both fatal and not fatal. However, this research criticizes the Heise's theory stating that not fatal and fatal effects are independent. The cases indicate the relationship (from not fatal to fatal).

Based on the finding in this research, it is important to provide training for midwives working for Antenatal Care (ANC). They need to improve their skills, knowledge, and attitudes in order to understand violent acts during pregnancy of antenatal care at the Public Health Centre. They could learn about how to investigate violence committed upon the victims (screening) through a specific method by which the victims feel safe and comfortable. They could share empathy and help to the victims. In addition, they could provide medical treatment, offer counseling, and recommend an agency for guidance and legal support.

References

- [1] Heise, L. L., J. Pitanguy and A. Germain (1994). "Violence against women. the hidden health burden."
- [2] Nur, R. (2012). "Violence of Women in Donggala Regency " Sains and Teknologi 13 No 1 90-100.

- [3] Heise, L. and C. Garcia-Moreno (2002). "Violence by intimate partners."
- [4] Curry, MA., Perrin N and Wall E., 1998. Effects of Abuse on Maternal Complications and Birth Weight in Adult and Adolescent Women. *International Journal Of Obstertics and Gynecology*, Vol. 92 Pp 530-534
- [5] Martin, S. L., B. Kilgallen, A. O. Tsui, K. Maitra, K. K. Singh and L. L. Kupper (1999). "Sexual behaviors and reproductive health outcomes: associations with wife abuse in India." <u>Jama</u> 282(20): 1967-1972.
- [6] Koenig, M. A., I. Zablotska, T. Lutalo, F. Nalugoda, J. Wagman and R. Gray (2004). "Coerced first intercourse and reproductive health among adolescent women in Rakai, Uganda." <u>International Family Planning Perspectives</u>: 156-163.
- [7] Matasha, E., T. Ntembelea, P. Mayaud, W. Saidi, J. Todd, B. Mujaya and L. Tendo-Wambua (1998). "Sexual and reproductive health among primary and secondary school pupils in Mwanza, Tanzania: need for intervention." <u>AIDS care</u> 10(5): 571-582.
- [8] Hakimi, E. N. H., Utari Marlinawati., Anna Winkvist., Marry C. Ellsberg. (2001). "Membisu Demi Harmoni, Kekerasan Terhadap Istri dan Kesehatan Perempuan di Jawa Tengah."
- [9] Dixon-Mueller, R. (1993). "The sexuality connection in reproductive health." <u>Studies in family planning</u>: 269-282.
- [10] Barua, A. and K. Kurz (2001). "reproductive health seeking by married adolsencent girls in Maharashtra India." Reproductive health matters 9 (17): 53-62
- [11] Darwin, M.d.T. (2001)."Keberdayaan Perempuan dalm Kesehatan Reproduksi."
- [12] Heise, L.L. (1998)." Violence againts women in integrated, ecological framework." Violence againts women 4(3): 262-290
- [13] Gavin, L.A.P. MacKay, K. Brown, S. harrier, S. J. Ventura, L., Kann and G. Ryan (2009), Sexual and reproductive health of person aged 10-24 years. United States, 2002-2007.
- [14] Thananowan, Nanthana and Suasan M. Heidrich., 2008. Intimate Partner Violence Among Pregnant Thai women. Violence Againts Women, Vol. 14, No. 5, 509-527
- [15] Robert, T.A.,P. Auinger and J. D. Klein (2005)." Intimate partner abuse and the reproductive health of sexually active female adolescent health 36 (5): 380-385.
- [16] Notobroto, Hari Basuki., 2007. Insidensi Anemia Kehamilan, Faktor Yang Mempengaruhi, dan Pengaruhnya Terhadap Terjadinya Komplikasi Kehamilan, Persalinan Dan Nifas. Perpustakaan Universitas Airlangga, Surabaya.

- [17] Prihastuti, Dewi., 2004. Analisis Lanjut SDKI 2002-2003, Kecenderungan Prefernsi Fertilitas, Unmetneed dan Kehamilan Tidak Diharapkan di Indonesia. BKKBN, Jakarta
- [18] Singarimbun, M. 1994. Penurunan Angka Kelahiran: Aspek-Aspek Sosial Budaya dan Program. *Prisma*, 23(6):27-42.
- [19] Manuaba, Ida Bagus Gde. 2000. Memahami Kesehatan Reproduksi Wanita. Arcan, Jakarta
- [20] Golding, J., 1996. Sexual Assault History and Women's Reproductive and Sexsual Health, Pysichology of Women Quarterly.
- [21] Ni Komang, Yuni Rahyani., 2004. Efektivitas Pelatihan Terhadap Peningkatan Pengetahuan, Sikap dan Perilaku Bidan Mengkaji Tindak Kekerasan Pada Ibu Hamil Yang Antenatal care di Puskesmas se Kab. Badung dan Kota Denpasar Bali, Fakultas Kedokteran UGM Yogyakarta.
- [22] Hastuti. 2009. Pembagian Kerja Serta Peran Suami Istri Dalam Pengambilan Keputusan di Rumah Tangga Perdesaan, *Disertasi*, Fakultas Geografi Universitas Gadjah Mada, Yogyakarta
- [23] Chowdhary N and V,Patel., 2008. The Effect Of Spousal Violence On Women's Health: Findings From The Stree Arogya Shodh In Goa, India. *Journal Postgraduate Medicine*. Oct-Dec;54 (4):306-12.
- [24] Djoko Hartono, Haning Romdiati dan Eniarti Johan (1999), *Akses Terhadap Pelayanan Kesehatan Reproduksi: Studi Kasus Di Kab. Jayawijaya*. Pulitbang Kependudukan dan Ketenagakerjaan LIPI Bekerjasama dengan Australian National University (ANU-Canberra), Jakarta.