

# Intervention on pre-marriage course: case of too young to be married

# Agus Sulistyono <sup>1</sup>, Hermanto Tri Joewono <sup>1\*</sup>, Djatmiko <sup>2</sup>, Handayani <sup>3</sup>, Esa <sup>3</sup>, Iyana <sup>3</sup>, Aditiawarman <sup>1</sup>

<sup>1</sup> Division of Maternal-Fetal Medicine, Department of Obstetrics and Gynecology, Faculty of Medicine-Dr. Soetomo Teaching Hospital, Universitas Airlangga, Surabaya 60131, INDONESIA

- <sup>2</sup> Department of Obstetrics and Gynecology, Faculty of Medicine-Dr. Soetomo Teaching Hospital, Universitas Airlangga, Surabaya 60131, INDONESIA
- <sup>3</sup> Burneh Public Healthcare Center, Bangkalan 69121, INDONESIA
- \*Corresponding author: hermanto.tri@fk.unair.ac.id

#### Abstract

**Background:** Pre-marriage course is a short course before the wedding providing knowledge, understanding, and skills needed in marriage. The new course adds pre-marriage agreement on specific family planning and consents to refer the mother if she faces obstetric emergencies. This study analyzed the impact of pre-wedding course intervention in postponing the pregnancy.

**Methods:** This was a retrospective study using medical records through home visit to the couples. **Results**: There were 29 couples in a one-year program at Office of Religious Affairs, Burneh Subdistrict. There were 4 women (13.8%) aged <20 years old and 25 women (86.2%) aged 20-35 years old. After one year, there was 1 pregnant woman (25%) under 20 years and 6 pregnant women (24%) in other group. One women already gave birth, four women lost to follow-up. There were no complications and maternal death reported.

**Conclusion:** This pre-marriage course had better results on reducing maternal death and postponing the pregnancy, especially for the adolescent couples.

Keywords: pre-marriage course, postponing the pregnancy, adolescent couple

Sulistyono A, Joewono HT, Djatmiko, Handayani, Esa, Iyana, Aditiawarman (2020) Intervention on pre-marriage course: case of too young to be married. Eurasia J Biosci 14: 2139-2142.

© 2020 Sulistyono et al.

This is an open-access article distributed under the terms of the Creative Commons Attribution License.

#### INTRODUCTION

Adolescence is a transition period in all aspects, either biological, psychological, or social (Paladugu et al. 2018). This period is a difficult time for adolescents. As biological development, they have to face conflicting emotional and social pressures. Types of reproductive health risks faced by adolescents have different characteristics with children and adults. These types of risks include early pregnancy, unwanted pregnancy, abortion, sexually transmitted diseases, sexual assault, and limited access to information and health services (Morris et al. 2015).

The 2012 Indonesian Demography Health Survey (IDHS) shows that the Age-Specific Fertility Rate (ASFR) of women aged 15-19 reaches 48 per 1000 women aged 15-19. This figure slightly decreases compared to the 2007 IDHS, amounting to 51 per 1000 women aged 15-19 years. The high ASFR of women 15-19 years indicates the high rate of early marriage and premarital sex among adolescents. The "4 Too" factor (too young, too often, too much, and too old) is one of the indirect causes of maternal death overcome by

family planning services (Indonesia Ministry of Health 2012).

Maternal mortality rate (MMR) is an indicator of the impact of various efforts aimed at improving the degree of maternal health. Mother's death will not occur without a pregnancy. Maternal mortality is a major problem because it causes the state to lose a number of productive forces, increasing child morbidity and mortality (Fitriani et al. 2019) Maternal mortality also occurs because of delaying in medical treatment, referral process and complications (Handriani et al. 2015, Syarifuddin et al. 2019). The most occurring maternal complication is preeclampsia (Lumbanraja, 2013). Maternal complications are also increased by anemia and obesity during pregnancy and caesarean delivery (Chongsuvivatwong et al. 2010, Lumbanraja et al. 2019). Therefore, pregnancy is a proxy for the proxy of maternal death, in addition to complications of pregnancy and childbirth (Pan, 2020). Reducing the incidence of maternal death, we need to regulate pregnancy; then it does not occur in conditions that are at high risk for complications (WHO, 2019).

Early marriage has a relationship with both the mother's and the child's health (Suhariyati et al. 2019). Pre-marriage course is a short course before the marriage conducted by Marriage Advisory, Fostering, and Preservation Agency (BP4) or accredited institutions for the brides providing knowledge, understanding, and skills needed in marriage. According to guidelines from ministry of religion, the course intends to encourage sakinah, mawaddah, and rahmah family and minimizes constraints, divorce, and domestic violence. Pre-marriage course must be attended and succeeded before marriage, including marriage procedure, religious knowledge, marriage regulations, rights and task of husband and wife, reproductive health, management of marriage, and wedding and marriage psychology (Shah et al., 2016). Strategies to deliver the topics are interactive presentation, simulation, and case study. Speakers are invited from office for religious affair and health office or rural health center, and the course is conducted by BP4 or other accredited institutions. By the end of the course, participants receive certificate of attendance and graduation. The new course adds premarriage agreement on specific family planning and consent to refer the mother if she faces obstetric emergencies.

The bride and groom course has often been considered a marriage requirement and carried out as part of the Office of Religious Affairs activities with little involvement in the public health center (Puskesmas). The maternal mortality rate is influenced by events in the upstream where one of them is the readiness of the mother to get pregnant which can be optimized by strengthening the bride and groom. Strengthening can be obtained by one of them postpone pregnancy at the age of the mother under 20 years (Haseeb et al., 2020). This study analyzed the impact of pre-wedding course intervention in postponing the pregnancy.

# METHODS

This was a retrospective study using data from bride and groom records at Office of Religious Affairs and Burneh Public Healthcare Center, Bangkalan, East Java, Indonesia from May 2015 to April 2016. Every bride registered at Office of Religious Affairs of Burneh District was recorded and received an explanation from the Burneh Public Healthcare Center. In addition to the obligation to sign pre-pregnancy agreements, the couple received education about physical, mental and social marriage preparations, pregnancy preparation including postponement of pregnancy until the age of the woman reaches 20 years for brides who are still teenagers, labor and childbirth preparation, and newborn care. Data were analyzed descriptively. Sulistyono et al.

## RESULTS

There were 29 couples in a one-year program at Office of Religious Affairs, Burneh Sub-district. There were 4 women (13.8%) aged <20 years, 25 women (86.2%) aged 20-35 years, and no women aged >35 years. After one year, in May 2016, there was 1 pregnant woman (25%) under 20 years and 6 pregnant women (24%) aged 20-35 years. One women (4%) already gave birth, and four women (16%) lost to follow-up. There were no complications in pregnancy and delivery and maternal and neonatal death reported.

# DISCUSSION

Our findings show that this new course had better results on reducing maternal death and postpone the pregnancy, especially for the adolescent couples. Similar with previous study, pre-marriage counseling in Turkey is to raise the status of women health, to reduce early marriage, to increase the use of modern family planning methods, and to reduce unwanted pregnancies, induced abortions, and maternal mortality (Erdem et al. 2014).

Adolescent reproductive problems, in addition to physical impact, can also affect mental and emotional health, economic conditions and social welfare in the long term (Leftwich et al. 2017). These long-term impacts not only affect adolescents themselves but also family, society and the nation in the end. Teenage pregnancies less than 20 years of age are more likely to deliver preterm and experience a high risk of fetal and neonatal death (Demirci et al. 2016). Pregnancy in adolescence has a high medical risk because the reproductive organs are not mature enough to perform its function (Yılmaz et al. 2018).

Pregnancy and childbirth carry a higher risk of morbidity and mortality in adolescents than in women in their 20s, especially in areas where medical services are very scarce or unavailable. Compared to mothers aged 20-24, young adolescent mothers are found to face higher odds for eclampsia, anemia, hemorrhage, sepsis, cephalopelvic disproportion, prolonged labor and caesarean section (Putra et al., 2020). Adolescent mothers are more likely than older mothers to have sociodemographic characteristics associated with adverse outcomes of pregnancy (Moraes et al. 2018). Prolonged labor and difficult deliveries can cause longterm complications. Young women often have limited knowledge or lack of confidence to access the health care system, resulting in limited prenatal care having an essential role in the occurrence of complications (Leftwich et al. 2017, Paladugu et al. 2018).

Various attempts have been made by the government to reduce maternal mortality, one of which is by increasing primary health services through antenatal services, where the improvement of primary health care itself is primarily intended for the EurAsian Journal of BioSciences 14: 2139-2142 (2020)

implementation of early detection of health problems (Indonesia Ministry of Health 2013). As a proactive effort to reduce the MMR, in Surabaya a strategic program was launched, namely the pre-pregnancy agreement for the bride and groom. The program is implemented in Burneh Sub-district, Bangkalan, East Java, Indonesia with the signing of the agreement between the Head of Burneh Office of Religious Affairs and the Head of Burneh Public Healthcare Center. The contents of the pre-pregnancy agreement are; 1) Planning during pregnancy and pregnancy spacing; 2) Planning to have a maximum of 15 (fifteen) children; 3) Immediately referred if there is an emergency situation such as experiencing seizures, bleeding and tightness; 4) Installation of an IUD immediately after the childbirth or immediately join birth control; 5) Maintaining the wedding committee as a labor preparation committee.

The prenuptial agreement here refers to an agreement to plan the number and distance of the child (Joewono, 2012). They usually get pregnant immediately after marriage under the pressure of family and community. This is an unwanted pregnancy for most adolescents. In addition, it also determines the age of first time pregnant. Various studies have shown that the risks and complications of pregnancy in adolescents are very high (Allahverdizadeh et al. 2018). On the other

hand, this prenuptial agreement can be considered as an effort to increase the role of women in the household by women empowering (Joewono 2012). This program has a long-term impact where there are changes in the behavior of people who still want child marriage considered to reduce poverty, but in fact, it adds to the cycle of poverty and divorce (Nour 2009).

Efforts to improve maternal outcomes may be significantly strengthened through programs of antenatal and postpartum care focused on the prevention and recognition of pregnancy and childbirth complications. Substantial reduction of maternal mortality and morbidity will require long-term investment in community education and family planning and, ultimately, the empowerment of women (Lucas et al. 2003). Another report also stated that early marriage through female empowerment negatively affects child mortality (Guilbert, 2013).

## CONCLUSION

This new course results in better understanding for the providers on the new role of pre-marriage course on reducing maternal death and postponing the pregnancy, especially for the adolescent couples.

# REFERENCES

- Allahverdizadeh S, Kohan S, Farajzadegan Z, Ghojazadeh M, (2018) Designing a guideline for empowering married adolescent girls in reproductive health: a mixed-method study protocol. Reproductive Health 15(1): 211. https://doi.org/10.1186/s12978-018-0654-9
- Chongsuvivatwong V, Bachtiar H, Chowdhury ME, Fernando S, Suwanrath C, Kor-Anantakul O, et al., (2010) Maternal and fetal mortality and complications associated with cesarean section deliveries in teaching hospitals in Asia. Journal of Obstetrics and Gynaecology Research 36(1): 45-51. https://doi.org/10.1111/j.1447-0756.2009.01100.x
- Demirci O, Yılmaz E, Tosun Ö, Kumru P, Arınkan A, Mahmutoğlu D, Selçuk S, Dolgun ZN, Arısoy R, Erdoğdu E, Tarhan N, (2016) Effect of Young Maternal Age on Obstetric and Perinatal Outcomes: Results from the Tertiary Center in Turkey. Balkan medical journal 33(3): 344-349. https://doi.org/10.5152/balkanmedj.2015.150364
- Erdem Y, Topuz Ş, Güneş NB, (2014) Progress related to maternal and neonatal health in Turkey. J Neonatal Biol 3(2): 131.
- Fitriani, Masni, Bustan MN, Salmah U, Stang, Syafar M, (2019) Analysis of risk factors maternal mortality in Sinjai District. Indian Journal of Public Health Research and Development 10(10): 1503-1507. https://doi.org/10.5958/0976-5506.2019.03050.X

Guilbert N, (2013) Early marriage, women empowerment and child mortality: married too young to be a good mother.

- Handriani I, Melaniani S, (2015) The Effect of Referral Process and Complications to Maternal Mortality. Jurnal Berkala Epidemiologi 3(3): 400-411. https://doi.org/10.20473/jbe.V3l32015.400-411
- Haseeb M, Haouas I, Nasih M, Mihardjo LW, Jermsittiparsert K, (2020). Asymmetric impact of textile and clothing manufacturing on carbon-dioxide emissions: Evidence from top Asian economies. Energy, 196: 117094.

Indonesia Ministry of Health, (2012) Laporan Survei Demografi Dan Kesehatan Indonesia. Jakarta.

- Indonesia Ministry of Health, (2013) Rencana Aksi Percepatan Penurunan Angka Kematian Ibu Di Indonesia. Jakarta.
- Joewono HT, (2012) Menurunkan Kematian Ibu Hamil dan Melahirkan Melalui Pemberdayaan Wanita. Jakarta: Global Persada Press.

Leftwich HK, Alves MVO, (2017) Adolescent pregnancy. Pediatric Clinics 64(2): 381-388.

- Lucas AO, Stoll BJ, Bale JR, (2003) *Improving birth outcomes: meeting the challenge in the developing world.* National Academies Press.
- Lumbanraja SN, (2013) Determining the maternal characteristics that predicts the adverse outcomes for patients with preeclampsia. Journal of the University of Malaya Medical Centre 16(1): 1-6.
- Lumbanraja SN, Yaznil MR, Siregar DIS, Sakina A, (2019) The correlation between hemoglobin concentration during pregnancy with the maternal and neonatal outcome. Open Access Macedonian Journal of Medical Sciences 7(4): 594-598. https://doi.org/10.3889/OAMJMS.2019.150
- Moraes AN, Likwa RN, Nzala SH, (2018) A retrospective analysis of adverse obstetric and perinatal outcomes in adolescent pregnancy: the case of Luapula Province, Zambia. Maternal health, neonatology and perinatology 4: 20. https://doi.org/10.1186/s40748-018-0088-y
- Morris JL, Rushwan H, (2015) Adolescent sexual and reproductive health: The global challenges. International Journal of Gynecology & Obstetrics 131: S40-S42. https://doi.org/https://doi.org/10.1016/j.ijgo.2015.02.006
- Nour NM, (2009) Child marriage: a silent health and human rights issue. Reviews in obstetrics & gynecology 2(1): 51-56. Available at: https://pubmed.ncbi.nlm.nih.gov/19399295
- Paladugu RK, Donipudi PC, Chimata D, Jasti M, (2018) Adolescent pregnancy and its outcomes: a cross-sectional study. Int J Community Med Public Health 5(10): 4408-4414.
- Pan T, (2020). Psychological and exercise interventions for teenagers with internet addiction disorder. Revista Argentina de Clínica Psicológica, 29(2): 226-231.
- Putra AP, Sukmana BI, Fakhriadi R, Achmad H, (2020). The Influence of Student-Based Factors on the Differences in Knowledge, Attitudes, and Perceptions of Euthanasia Based on Biology Education. Systematic Reviews in Pharmacy, 11(3).
- Shah SMM, Hamid KBA, Malaysia UU, Shaikh UA, Malaysia PSUU, Qureshi MA, Pahi MH (2016) The Relationship between Leadership Styles and Job Performance: The Role of Work Engagement as a Mediator. International Journal of Social Studies, 2(10): 242-253.
- Suhariyati S, Haryanto J, Probowati R, (2019) Trends of Early Marriage in Developing Countries: A Systematic Review. Jurnal Ners 14(3 (si)): 277-282.
- Syarifuddin, Thaha R, Abdullah AZ, (2019) Intermediate determinants in maternal mortality: Case study Tojo Una, Una District. Indian Journal of Public Health Research and Development 10(4): 908-913. https://doi.org/10.5958/0976-5506.2019.00822.2
- WHO, (/2019) Maternal mortality. Available at: https://www.who.int/news-room/fact-sheets/detail/maternal-mortality [Accessed 7 April 2020]
- Yılmaz E, Işıtan Ö, Soysal Ç, Yılmaz Z, Kara O, Küçüközkan T, (2018) The influence of anemia on maternal and neonatal outcomes in adolescent pregnant. Journal of Surgery and Medicine 2(2): 69-73.

www.ejobios.org