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Contents

#### Volume 10, November 11

November 2019

1.	Effect of Informational Support on Quality of Life among Pregnant Women with Antiphospholipid Syndrome	
	Fatma Zaghloul Mahmoud, Yousria A. Elsayed, Abeer S. Eswi, Rania M. Abdel Ghani	
2.	Employees' Perspective of Knowledge Management in Health Care Industry on Their Performance  C. Kathiravan, E. Chandramouli	(
3.	Sterilization and Disinfection in Orthodontics: A Literature Review	12
4.	Nutritional Content and Quality Analysis of Palm Sugar in Pledokan Village, Sumowono	18
5.	Triphala: A Wonder Therapy in Dentistry	22
6.	Diet Counseling: Prevention for Early Childhood Caries	26
7.	Determinants of Unmet Need for Family Planning in Tegal and Klaten Regency	30
8.	Incidentally Significant Finding in an Asymptomatic Patient	35
9.	Oral Manifestation of Viral Disease in Children  Digma Digdarshni	39
10.	Oral Focal Mucinosis: A Rare Clinical Entity	42
11.	Endoscopic Approach to Maxillofacial Trauma	45
12.	Recent All Ceramic Systems in Dentistry: A Systemic Review	49

13.	Duta Safety Riding: The Actors of Traffic Accidents Prevention in Samarinda, East Kalimantan, Indon Dina Lusiana Setyowati, Risva, Andi Anwar	nesia52
14.	Post Operative Care: A Review Sushil Kumar Sahoo, Santosh Kumar Subudhi, Sthitaprajna Lenka, Sanchari Sinha Roy, Harsh Mohan Pathak	57
15.	Platelet Rich Fibrin: A Promising Innovation in Periodontics	62
16.	Electrolyte Supplementation on Workers Under Heat Stress: A Preliminary Study on Workers' Hydration and Performance  Daru Lestantyo, Suroto	66
17.	Minerals and Oral Health	72
18.	Effect of Training to Knowledge and Practices of Dasa Wisma Activists as Pregnant Women Assistants in Preventing Low Birth Weight	76
19.	Ozone-Boon in Dentistry	81
20.	An Unusual Presentation of Laryngopharyngeal Reflux in A 12 Year Old Boy: A Case Report	85
21.	Oral & Perioral Piercing: Fashion or Vandalization from Dentists' Perspective	89
22.	Risk Factors of Pregnancy Incidence before 20 Years Old in Indonesia in 2016	94
23.	Patient Centered Care: A Paradigm Shift in the Delivery of Oral Health Care	99
24.	Microbial Host Interaction in Periodontal Diseases  Ayushi Priya	104
25.	Evaluation of Mass Drug Administration (A Cross Sectional Study in Sanggu Village, South Barito, Central Kalimantan, Indonesia)	108
26.	Effects of Tobacco in Females all Over the World	113
27.	Ethnomedicinal Plants of Odisha: An Alternative Therapeutic Choiceagainst Multidrug Resistant Bacteria	116

## Risk Factors of Pregnancy Incidence before 20 Years Old in Indonesia in 2016

Djoko Nugroho<sup>1</sup>, SriWinarni<sup>1</sup>, Farid Agushybana<sup>1</sup>, Najib<sup>2</sup>, Undari Nurkalis<sup>1</sup>

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#### Abstract

Young age pregnancy is an important public health problem, due to its high association with mortality and morbidity for both mother and the child and also reflect the country's welfare. Teenage mother often have problems related to labor or postpartum period. Lack of knowledge can be caused by low education, which create barrier upon receiving message. Highly educated people tend to have more information, from other people as well as press, and they're also more open to new value compared to less educated people. Marriage below 20 years increase the odd of pregnancy before 20 years. Knowledge about contraceptives is crucial and related to Maturing Age of Marriage programe. Problems in Maturing Age of Marriageprograme will increase pregnancy below 20 years rate. Descriptive analysis related to pregnancy risk factors below 20 years old is needed throughout Indonesia.

Keywords: Marriage age <20 years; contraceptives knowledge; pregnancy <20 years.

#### Introduction

Children quality reflect country's welfare. Maternal and child mortality reflect people health status and welfare. Based on the Indonesian Demographic and Health Survey 2012, maternal mortality rate associated with pregnancy and childbirth accounted for 259 per 100,000 live births. Maternal factor that affects the health status of children and mothers is age during pregnancy and childbirth. 2.3

Maternal age at the time of pregnancy affects the mother's pregnancy because it is related to the maturity of reproductive organs and mother's psychological condition to receive pregnancy. Young age pregnancy (less than 20 years) is one of 4T criteria of high risk pregnancy.<sup>4,5</sup>

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Based on riskesdas (Basic National health research) 2013 on women aged 10-54 years, 2.6 percent first marriage occurs at age less than 15 years and 23.9 percent married at age 15-19 years.<sup>6</sup> The result of Indonesia Demographic and Health Survey in 2012, median age of first marriage of Indonesian women was 20,1 years; while the Indonesian Demographic and Health Survey 2007 showed the median age of first marriage was at the age of 19.8 years and the results of the 2002-2003 Indonesian Demographic and Health Survey showed 19.2 years. This shows increasing trend of the median age of first marriage within the last 10 years although not yet in accordance with the expected target of 21 years.<sup>2</sup>

Early marriage that causes young pregnancy often occurs due to parents factor. They often think that girls is an economic burden and marriage is one of the attempt to maintain family life. The younger the marriage age, the lower the level of education achieved by the child because of the responsibilities of being a wife and expectant mother. Teenagers in rural areas are more likely to be mothers compared to urban area.

Age Specific Fertility Rate (ASFR) for the age 15-19 years describes the number of pregnancies in adolescents aged 15-19 years. Results of the Indonesian Demographic

and Health Survey 2012, ASFR for 15-19 year olds were 48 per 1,000 women aged 15-19 years while the target expected in 2015 was 30 per 1,000 women aged 15-19 years. Younger the marriage age means longer time span of reproduction. Riskesdas 2013 showed the pregnancy rate at age less than 15 years old was 0,02 percent, while pregnancy rate in adolescence (15-19 years old) was 1,97 percent. Pregnancy regulation is crucial because it affects the fertility rate in Indonesia.

Pregnancy below 20 years of age is influenced by education, contraceptive knowledge, contraceptive behaviour, culture, adolescent/dating behavior, health care, providers and income. Teenage women, at age of 15-19 years, responsible for 15 million birth each year. According to the data from Central Bureau of Statistics, teenage marriage rate in Indonesia was 8.8%. In developing country, 1 to 4.4 million teenagers have a miscarriage; and most procedures are performed under unsafe conditions. Complications of pregnancy and childbirth are the leading causes of death between the ages of 15-19. Limited knowledge or limited access to health care systems was the leading factors for pregnancy complications. 9

Lack of knowlegde can be caused by low education, which will create barrier upon receiving message or information. <sup>10</sup> In the other hand, higher education means it easier to receive the information. <sup>11</sup>

Data from Central Java showed that women who married before 21 years are 54.67%. The highest percentage of marriage before 21 years are in Rembang (72.17%). In the other hand, there are 13.82% men who married under 25 years, with highest percentage in Banjarnegara (23.59%). Underage marriage will lead to pregnancy under <21 years of age. This also happened in several provinces throughout Indonesia.

From data above, we decided to create a descriptive study to find risk factors related to high number of parity before 20 years old throughout Indonesia.

#### Method

A descriptive, cross sectional study was conducted to describe several factors related to teenage pregnancy: maternal education, marriage age, contraceptive knowledge and the age of first childbirth.

Target population were Indonesian woman who pregnant before 20 years old. The sample of this study

were 456,686 Indonesian woman who were pregnant before 20 years 2016. Univariate and bivariate data analysis were provided in this

#### Results and Discussions

Characteristics of subject are shown in Table 1.

Table 1.Univariate analysis of education level, married age, contraceptive knowledge, first birth and pregnancy <20 years

Variable	f	%
Education Level		
No formal education	954	2.09
Elementary, not graduate	0	0
Elementary, graduate	17.377	38,13
Junior High, not graduate	0	0
Junior High, graduate	13.929	30,57
Senior High, not graduate	0	0
Senior High, graduate	8.682	19,05
University / academy	4627	10,16
Marriage age		
20-35 years	26,907	59,05
< 20 years	18,662	40,95
Contraceptive Knowledge		
No	116	0,25
Yes	45,453	99,75
First Birth		
20-35 years	33,429	73,36
< 20 years	12,140	26,64
Pregnancy < 20 years		
No	33,429	73,36
Yes	12,140	26,64

Based on table 1.1, the highest education of Indonesian fertile women is elementary school (33.18%) and graduated from junior high school (30.57%). As many as 59.05% of sample married at 20-35 years, and 99.75% of them know about contraception. There are 73.36% women who not pregnant before 20 years

In our study, majority of childbearing age women have low education level, which consisted of primary school education and junior high school, 38.13% and 30.57% respectively. Unicef (2008) mentioned that factors contributing to teenage pregnancy are lack of education and information about sexual health especially from parents.

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