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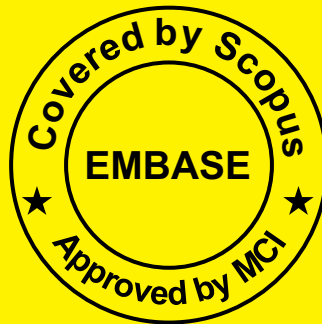


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# Characteristics of the Maternal and Child Health Service of Female Workers with Maternal and Child Health Status in Indonesia

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## Abstract

Maternal and Child Health (MCH) service for female worker from before the pregnancy until the first day of a child's life needs to be done because of so many risks that the worker will face. Accompaniment is done to determine the health condition of the worker and the health of the fetus (infant). The purpose of this study was to provide an overview about characteristics of the maternal and child health service of female workers with maternal and child health status in Indonesia.

The design of this study was observational descriptive. The study was conducted on female workers in industrial area with 500 respondents. This study variables were included marital status, age of first pregnancy, pregnancy examination, personnel who assisted the process of pregnancy check up until maternity process, the place of maternity, pregnancy disorder, miscarriage / *abortus*, exclusive breastfeeding and immunization. Data collection techniques in the form of filling questionnaires either in direct interview or not. The results showed that 66.6% of female workers married at the age of 17-25 years. 67.2% were pregnant at the age of 20-27 years. 56.6% of female workers performed monthly pregnancy checkups. 67% of pregnancy checks performed by midwives. 43.05% stated that delivery was done at midwife's home. 31.7% of female workers experienced pregnancy disorders. 47.7% of workers provided exclusive breastfeeding. 99% of workers have provided basic immunization. The Maternal and Child Health service that have been received are good enough but the health promotion and provision of MCH service should be done in the company.

**Keywords:** *Female workers, Maternal and Child health, MCH status*

## Introduction

Both female and male workers are at risk to encounter stress. Baker<sup>1</sup> found that stress experienced by a person will change the way the immune system works. There are physical, chemical, biological, ergonomic, and psychosocial risks in the workplace. Those risks

are harmful to women and their fetuses, especially chemical hazards. Chemical and radiation can cause disability occurrence in newborn infant, low birth weight incidence, fetal death (infant death), and the incidence of recurrent abortion. If the company can preempt, then the occurrence of these risks due to the hazards in the workplace can be minimized.

Unconsciously, female workers have made a natural neglect of their babies and children. The child is left at home because the mother is working to help the economic condition of the family. This happens usually in urban migrants who do not think too much about their nutritional status. Based on data from the Health Office of Sidoarjo district in 2016, the number of exclusively

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breastfeeding infant is still low. From 5,602 infants who were examined, only 54.7% received exclusive breastfeeding

It is necessary to provide accompaniment to the female worker from before the pregnancy until the first thousand days of a child's life because of the many risks that will be experienced by the mother in those times. Accompaniment is done to determine the health condition of the worker and the fetus (infant). Therefore, a study was conducted to identify problems in female workers to rescue the first 1000 days of life and to make recommendation based on the diagnosis of the problem in order to save the first thousand days of life in formal sector female workers in Sidoarjo district. The aim of this study was to provide an overview of Characteristics of MCH service female workers with MCH status in Indonesia.

### **Material and Method**

The design of this study was observational descriptive. The study was conducted on female workers in Sidoarjo industrial area, Indonesia. The data were collected from September to November 2017. This study respondents were 500 people with inclusion criteria for female workers who have worked for more than a year. In the study process there were several female workers who withdrew from the study for some reason so that the number of samples decreased into 439. Variable studied were MCH service and MCH status. The variables include: marital status, age of first pregnancy, pregnancy examination, personnel who assist the process of the pregnancy check up until the maternity process, the place of maternity, pregnancy disorder, miscarriage, exclusive breastfeeding and immunization, Data collection techniques in the form of filling questionnaires either in direct interview or not. Analytical method used descriptive analysis with the help of data analysis software.

### **Result**

This study focused on female laborers working in Sidoarjo, Indonesia. The description of MCH service and labor status characteristics. Attempts to know the service and status of MCH are important to predict and improve the status of 1000 DOF (day one of life). This period is important for mother's health and baby's growth which will be one of the most important growth periods of her life.

#### **1. Marital age**

Marital age becomes one of the important things associated with mother readiness to be pregnant and give birth. The results showed that 66.6% of female workers married at the age of 17-25 years. Most of them married at a good age to give birth. However there were 5% married at the age of less than 17 years and 2.1% married at the age of more than 35 years.

Young marriage age can lead to many healths and psychological problems. A marriage at an early age raises many complications during the pregnancy process and ultimately can cause maternal and infant deaths. In addition, young marriage also affects the psychological process which less good for the mother and child. Young marriage age can also increases the incidence of unplanned pregnancy, repetition of pregnancy less than 24 months and the occurrence of miscarriage.<sup>2</sup> Early marriage will also has an impact on child growth after birth. Nutritional problems such as diarrhea, malnutrition and other developing diseases.<sup>3</sup> other MCH problems that can occur include STD (sexually transmitted diseases), cervical cancer, maternal death and obstetric fistulas.<sup>4</sup>

#### **2. Pregnancy**

95% of female workers claimed to have been pregnant. The majority of 41.2% had been pregnant twice so far. However, there were 3.6% who got pregnant four times and there were respondents who stated that had been pregnant 5-7 times. Having more than two children will have an impact to the economic burden of the family that indirectly results in the fulfillment of nutrition for the child growth. In addition, high frequency of childbirth also has a strong relationship with the incidence of cervical cancer. So that female workers who have high delivery frequency are advised to do paps smear.<sup>5</sup>

#### **3. Age of First Pregnancy**

67.2% were pregnant at the age of 20-27 years old. However, 2.7% were pregnant at less than 17 years of age and 3.5% were pregnant for the first time at the age over 35 years old.

Age of pregnancy can also affect the health of the mother and child. Pregnancy at an early age can causes various diseases such as diarrhea, malnutrition, pregnancy disorders, cervical cancer<sup>1,2,3</sup> then pregnancy at the age of the tuga can cause health problems

hypospadias. Study in California showed that the mother who delivers at the age over 35 years old for the first time, will be at risk for hypospadias.<sup>6</sup>

#### 4. Pregnancy Examination

Pregnancy examination is one of the important things to do for the mother and child health during pregnancy. 56.6% of female workers were performed a monthly pregnancy check, but 1.8% stated that only examined thrice during pregnancy.

Pregnancy examination is strongly associated with maternal health and antenatal care which is acceptable during pregnancy.<sup>7</sup> Routinely pregnancy examination can better monitor the health of the mother and baby. Routinely examination prevents the disorder during pregnancy and it can help the birth process becomes safe. Pregnancy examination visit is also influenced by the attitude and affordability of the examination place.<sup>8</sup> Pregnancy examination can be improved either by passing a MCH program in a company such as providing a doctor or midwife who can periodically comes to the company and conducts health promotion to female workers about the importance of pregnancy examination regularly.

#### 5. Medical or Paramedic Personnel who Performs Pregnancy Examination

67% of female workers stated that pregnancy examination was done by midwife, 18% was done by obstetrician. It is interesting that there was still 1% who did pregnancy examination in a shaman.

The right examiner is certainly a doctor or midwife. Because they have good skill and knowledge which are related to pregnancy and the process of labor. The worker who still checks into a shaman certainly needs to be the one of the attention. One of the classic reasons for choosing a shaman is because of the location closeness and low cost<sup>9</sup>.

This study was conducted in Sidoarjo with easy access to health services so the importance of choosing a competent medical or paramedic personnel to do pregnancy examination is needed.

#### 6. The Place of Maternity

Maternity place can also affects the process and continuity of the baby's birth associated with the tools

and materials needed during the childbirth. 43.05% stated that delivery was done at midwife's house, 30% was done in hospital. The results showed that there were 2.5% still given birth at home and there were 0.5% at a shaman house.

#### 7. The Personnel who Helps Maternity

The personnel who helps the delivery will also determines whether the delivery process is going well. The results showed that 63.3% percent of births were assisted by midwife, 34.3% were assisted by doctor and there were 2.3% or 9 people who stated that the birth process was assisted by a shaman.

The place of maternity with its personnel who assisted the delivery process is already favorable in general, either assisted by an obstetrician or midwife. But there are still a number who assisted by a shaman. The selection of shaman can be influenced by cultural factor, lack of knowledge and access to health services.<sup>10</sup> A shaman selection is certainly one of the factors that can lead to maternal or infant deaths. Thus, it is necessary to promote MCH at the company or at an integrated health post (*posyandu*) to inform that the delivery process should be done in hospital, midwife's house, or other maternity place which is favorable and assisted by competent medical or paramedic personnel. This effort is essential to prevent maternal and child mortality.

#### 8. Pregnancy Disorder

31.7% of female workers who become respondents stated that they had a pregnancy disorder. The disorders include nausea, vomiting, high blood pressure, seizure, and bleeding.

Pregnancy disorder may be caused by age during pregnancy of less than 20 years old and over 35 years old, the examination is not assisted by medical personnel and not performed in a health facility, history of pregnancy disorder in previous pregnancy and occurring in high-risk women.<sup>11</sup> Based on the data that has been submitted we know that some people who are pregnant at the age of less than 17 years old and more than 35 years old, examine their pregnancy to a shaman. This certainly leads to disruption or complication of pregnancy which can occur in female workers.

#### 9. Miscarriage and Infant Mortality

14 respondents said that they had experienced a

miscarriage during pregnancy. 95.7% of miscarriages occurred at the age of 0-3 months. Among all of miscarriage cases, 81.8% had one miscarriage and 16.6% had two miscarriages.

Miscarriage and infant mortality can be caused by the age during pregnancy which is too young, the examination is not done by medical personnel routinely, the delivery process is done at home or at a shaman home, and can be caused by various hazards existing in the work environment. It is certainly necessary to do MCH promotion in the work environment, to perform hazard control in the workplace and to raise an awareness of working mother and their family about maternal and child health.<sup>1, 2, 10, 11</sup>

#### 10. Exclusive Breastfeeding

47,7% of female workers provided exclusive breastfeeding while the rest do not gave exclusive breastfeeding. There are various reasons i.e. the milk doesn't come out (43.1%) and busy working (46%). Exclusive breastfeeding is very important to the growth of toddlers. During the 6 months toddler should only consume exclusive breastfeeding.<sup>9,11</sup> Exclusive breastfeeding is important for the child's motoric growth, provide immunity to the disease, provide the nutritional intake required by infant and emphasizing the emotional bond between the baby and the mother<sup>13</sup>.

#### 11. Basic Immunization

99% of workers claimed to provide complete basic immunization through integrated health post / posyandu program.<sup>14</sup> Full immunization has been provided by the female workers for their child. Immunization is important to provide immunity to diseases that can be prevented by immunization. In addition, immunization is also important to prevent outbreak. Immunization is important to maintain the health and growth of children.

In general, health promotion efforts should be done about the importance of MCH to female workers. The company is also advised to provide MCH services toward pregnant workers. Such services may include the provision of a doctor or midwife who can periodically come to the workplace to examine the womb and provide health education, promotion of MCH health. A lactation corner is needed in the company to support exclusive breastfeeding. Cooperation of the company with local health authority is also required to provide favorable and

qualified MCH services.

### Conclusion

In general, the marriage age of female workers is good, but there are some workers who married at the age of less than 17 years old and more than 35 years old. This age is related to the first pregnancy age. This can causes pregnancy disorder until the delivery process.

In general, pregnancy examination have been routinely performed by the female workers and performed by medical personnel who has competence, but there were still a few who do not check pregnancy routinely and there were even still using a shaman service.

Selection of maternity and labor place which helps the delivery process is well done. But there were some people who are still given birth at a shaman. This needs to be overcome to maintain the mother and child health.

There was an incidence of miscarriage and infant mortality, this is related to the first age of pregnancy, less routinely pregnancy examination, and pregnancy examination that are not assisted by paramedic / medical personnel.

Some female workers had not given exclusive breastfeeding because of the busy work and the milk won't come out. MCH health promotion should be done in the workplace so the mother will know the importance of exclusive breastfeeding.

The immunization had been well done

There should be an effort to promote MCH services in the workplace so that a worker who is or will be pregnant knows the importance of maternal and child health attempts.

The company should provide MCH program by bringing a doctor or midwife who regularly come to the company every month to conduct health checks of pregnant and lactating mother if possible.

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