ANALYSIS OF SECTIO CAESAREA DELIVERY AT RSUD SRAGEN, INDONESIA

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Abstract

Background: Based on data in Sragen District, 2010 showed that AKI (mother mortality rate) written 69.7/10.000 live births and AKB (baby mortality rate) noticed 6.8/100.000 live births. Caesarean Section method was on of childbirth methods used to decrease AKI and AKB. It was common to be called caesarean Section which giving birth the baby by abdomen incision process. Based on data in private hospital of Sragen District (RSUD Sragen), the caesarean Section method in childbirth was increasing up to 481 until 2011.
Method: The research was observational study with case control design. The aims were to explain the medical factors influencing the caesarean Section in that hospital. The population was the mothers with childbirt in hospital. Thus, it was calculated by research providing 100 samples dividing by 50 case samples and 50 control samples.
Result: The result showed that there were relationship between CPD (p=0.0001), PEB (p=0.0001), abnormal location of the baby (p=0.0001), twins (p=0.0001) and birth canal problem (p=0.0001) with Sectio Caesarea childbirth action in RSUD Sragen.

Keywords: Sectio Caesarea, medical factors

1. Introduction

Sectio Caesarea was one method of childbirth besides the normal childbirth. The selection method was motivated by medical and non-medical factors, namely the mother feels fear, worry, and anxiety and pain for the shadows, so the method they choose it.[1] The method choosed because it was effective way to reduce the Infant Mortality Rate (IMR) and Maternal Mortality Rate (MMR) in order to achieve the Millennium Development Goals (MDGs) 2015: 102 per 100.000 live births. Basically the MMR and IMR are decreasing from 228 per 100,000 to 118 per 100.000 live births in 2007. In other side, MMR has decreased from 228 per 100.000 to 118 per 100.000 live births. It was still low compared with MDGs target (23 per 1000 live births). The data showed that MMR was decline from 34 per 1000 to 24 per 1000 live births.[2]

Deputy Minister of Health of the Republic of Indonesia, Ali Gufron Mukti stated at the opening of the Asia-Pacific Development Summit 2012 that the highest MMR in Indonesia was Java. This data was quite as tounding because Java has better access in health care than other province, so Indonesia should doing hard achieving MDGs from 228 per 100.000 live births to 102 per 100.000 live births (Kompas, 03/09/2012).

Maternal mortality was caused by indirect risk factors such as 3 delays: it was too late to take decisions and recognize the danger signs, referred delay, and the delay in medical treatment. One of prevention efforts was to delivery by health workers in health care facilities.[3]

The Data from health districts of Sragen showed that the MMR in 2010 was 69.7 per 100.000 live births. On the other hand, IMR 2010 was 6.8 per 100.000 live births and the birth rescue coverage in 2010 recorded 99.79% (health workers) and 0.21% (non-health personnel). This figure was still considered high compared to other regions in Central Java. The incident was considered as not maximal medical

treatment and knowledge of family factors on handling precision. The one of childbirth methods assumed can decrease MMR and IMR was Section Caesarea. General Hospital of Sragen showed that *Section Caesarea* occurring 481 number (33.33%) of 1443 childbirth in 2011.

Based on the description above, researcher want to analyze what factors are associated with decision-making actions in hospitals Sragen Sectio Caesarea.

2. Methods

This study was an observational study with a case-control design approach, which epidemiological studies to relate between exposure and disease with comparing cases and controls by presentation.[4] The case groups were mothers by Sectio Caesarea childbirth and the control group were mothers by normal childbirth recorded in general hospital of dr. Soehadi Prijonagoro, Sragen in October 2011.

The population was 122 documents of mothers and defined as the 50 samples. Then the researchers determined the 50 samples of Sectio Caesarea childbirth as case groups and 50 samples of normal childbirth as control groups.

Source of data was secondary and the instrument was medical documents review. The analys was of the data used was Chi square test due to the scale of the data of this study was the categorical types.

3. Result and Analysis

a. Explaining relation between *chepalo pelvik dispoportion* (CPD) with *Sectio Caesarea* childbirth

Chi-square test results $p = 0.0001$; OR = 30.412; CI = 8.242 to 112.217. The p-value<0.05 ($p = 0.0001$) showed that Ho was rejected, so there was a connection significantly between *chepalo pelvik dispoportion* (CPD) with *Sectio Caesarea* childbirth. Form of pelvic pathologic abnormalities or who have caused trouble in the normal birth process and should be taken delivery Section Caesarea.[1] Base on value of Odd Ratio (OR) showed that CPD patients had risk done Section Caesarea action 30 times compared with non-CPD. Therefore Section Caesarea was much recommended for CPD case.

Supporting the results, Sarmana (2004) explained that the demand of Sectio Caesarea was 21.5% because of the trauma.[5] The method in childbirth recommended was Section Caesarea.[6]

b. Explaining relation between weight pre eklamasi with *Sectio Caesarea* childbirth

Chi-square test resulted $p = 0.0001$; OR = 23.222; CI = 7.951 to 67.824. The p-value<0.05 ($p = 0.0001$) showed that Ho was rejected, so there was a connection relation between weight pre-eklamasi with *Sectio Caesarea* childbirth. Symptoms of weight pre-eklamasi could be detected by checking the blood pressure reached 160/110 mm Hg, the urine was less than 400 Oliguria cc/24 hours, proteinuria over 3 g/liter. The others subjective complaints were of epigastria pain, impaired visionand headache. In this examination obtained increasing levels of liver enzymes with icterus, bleeding in the retina and thrombos was platelets less than 100.000/mm.[7] Mohthar (1998) also explained that people with severe pre eklamasi with convulsion occurring coma condition.[8]

Base on *Odd Ratio* (OR) known that patient with weight pre eklamasi had 23 times the risk to be done in Section Caesarea. Supporting the results, Sarmana (2004) increasing the action of Section Caesarea childbirth was done for carrying of mother and baby.[5]

c. Explaining relation between premature rupture of membranes with *Sectio Caesarea* childbirth

Chi-square test resulted p = 0.0001; OR = 9.333; CI = 3.720 to 33.415. The p-value<0.05 (p = 0.0001) showed that Ho was rejected, so there was a significant connection between premature rupture of membranes with *Sectio Caesarea* childbirth. There were two possibilities the premature rupture of membranes occurring: premature rupture of membranes and preterm rupture of membranes. Both they have similar symptoms, namely a discharge and no pain complaints. Distinctive sign was a sudden discharge of fluid with distinctive but unlike the typical smell of urine. The flow was not too heavy and not abdominal pain and will be detected when the mother felt sore and pain if the fetus moves. Kasdu (2003) explained that the rupture of the amniotic sac in pregnancy was often the cause unconscious, so the doctor would accelerate the childbirth process because he felt fear if the mother and fetus will be infected.[1] Base on *Odd Ratio* (OR) value showed that patient with premature rupture of membranes had 9 times will be done by Section Caesarea than not.

d. Explaining relation between *makrosomia* (fetus enlarge) with *Sectio Caesarea* childbirth

Chi-Square test results showed p = 0.0001; OR = 155.167; CI = 19.317-1245.410. P-Value<0.05 (0.0001) graphed that Ho was be rejected, so there was relationship between *makrosomia* (fetus enlarge) with *Sectio Caesarea* childbirth. Base on *Odd Ratio* (OR) value was obtained that patient with fetus enlarge had possibility will done by Section Caesarea 155 times the risk than not. Supporting this research, Sarmana (2004) explained that baby with weight >4000 gr caused the Section Caesarea done.[5]

e. Explaining relation between abnormalities of fetus with *Sectio Caesarea* childbirth

Chi-Square test results was p = 0.0001; OR = 21; CI = 6.960-63.360. Chi-square test was obtained p<0.05 where it means Ho was rejected, so there was significant relationship between abnormalities of fetus with *Sectio Caesarea* childbirth. The fetus was lying lengthwise (longitudinal) in the womb, head and buttocks were in the fundus.[8] 3% of the overall percentage of infants with breech (breech) of them need help a cesarean method.[9] Base on *Odd Ratio* (OR) value showed that patient with abnormalities of fetus was 21 times the risk will be done by Section Caesarea than not.

f. Explaining relation between twins with *Sectio Caesarea*

Chi-square test results obtained p = 0.0001; OR = 49.611; CI = 13.050-188.607). P-value<0.05 (p = 0.0001) showed that Ho was rejected, so there was significant relationship between twins with *Sectio Caesarea* childbirth than not. Base on *Odd Ratio* (OR) value graphed that patient with twins had 49 times the risk to be done by Section Caesarea than not.

g. Explaining relation between barriers birth canal with *Sectio Caesarea* childbirth

Chi-Square test results was p = 0.0001; OR = 11.455; CI = 3.892-33.715. P-value<0,05 graphed that Ho was rejected, so there was significant relationship between barriers birth canal with *Sectio Caesarea* childbirth. Base on *Odd Ratio* (OR) value graphed that patient had barriers birth canal problem 11.4 times the risk to be done by Section Caesarea than not.

4. Conclusions and Suggestions

A. Conclusion

a. There was a relationship between *chepalo pelvik dispoportion* (CPD) with *Sectio Caesarea* childbirth. (p=0.0001; OR=30.412; CI=8.242-112.217).

b. There was a relationship between weight pre-eklamasi with *Sectio Caesarea* childbirth. (p=0.0001; OR=23.222; CI=7.951-67.824)

c. There was a relationship between premature rupture of membranes with *Sectio Caesarea* childbirth. (p=0.0001; OR=9.333; CI=3.720-33.415).

d. There was relationship between *makrosomia* (fetus enlarge) with *Sectio Caesarea* childbirth. (p=0.0001; OR=155.167; CI=19.317-1245.410)

e. There was significant relationship between abnormalities of fetus with *Sectio Caesarea* childbirth. (p=0.0001; OR=21; CI=6.960-63.360).

f. There was significant relationship between twins with *Sectio Caesarea* childbirth than not. (p=0.0001; OR=49.611; CI=13.050-188.607).

g. There was significant relationship between barriers birth canal with *Sectio Caesarea* childbirth. (p=0.0001; OR=11.455; CI=3.892-33.715).

B. Suggestions

a. For health agencies
General Hospital of Sragen are recommended to improve midwifery services especially in normal childbirth where as Section Caesarea for only medical recommendation.

b. For Community
The people should increase understanding of normal childbirth. Moreover, they try to prevent medical factor for them womb.

c. For the other researchers
Other researchers can study more in multivariate methods and compare non-medical factors also qualitative research so able to explore of background in Section Caesarea action selection.

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