

## **Relationship between mother's demand and *caesarean section* delivery in PKU Muhammadiyah Hospital Bantul Yogyakarta**

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### **Abstract**

*World Health Organization (WHO) globally found that the delivery of Caesarean section was about 25.7%. 27,3% average of Caesarean Section Delivery in Asia, 19,0% in Europe, 29,2% in Latin America and the highest number of Caesarean Section delivery were in China at the rate of 46,2% (Wang, Hellerstein, Hou, Zou, Ruan, & Zhang, 2017). Rates determined by WHO for each country were 10-15% (WHO, 2015). WHO (2015) stated that the causative factor that can be delivered by caesarean section is when vaginal delivery may have a risk to the mother and baby such as taking too much time for delivery, fetal disorders, or because the baby is in an abnormal position. This study aims at determining the relationship between mother's demand and caesarean section delivery at PKU Muhammadiyah Hospital Bantul. The type of research used in this study is quantitative research with Cross Sectional approach using secondary data, namely medical record data of PKU Muhammadiyah Hospital Bantul in 2017. Chi-Square with P value 0.05 and CI 95% was used of data analysis. The bivariate results obtained were mother's demand associated with delivery of Caesarean section with p value of 0,000 which means that the mother's demand had a significant relationship with the section caesarean delivery. Based on the analysis of health technology assessment (HTA), the selection efforts at caesarean section delivery were very beneficial for the mother and family, in terms of maternal health, economy and other factors.*

**Keywords:** *Caesarean section, caesarean section delivery on demand*

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### **INTRODUCTION**

The number of Caesarean delivery throughout the last few decades has drastically increased, this has become a problem and concern throughout the world.

Results from the World Health Organization (WHO) survey in 2004-2008 globally found that the delivery of Caesarean section was about 25.7%, the average of Caesarean section delivery in Asia was 27.3%, 19.0% in Europe, 29.2% in Latin America and the highest rates of delivery of Caesarean Section were China at 46.2% (Wang, Hellerstein, Hou, Zou, Ruan, & Zhang, 2017). Rates determined by WHO for each country were 10-15% (WHO, 2015).

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WHO (2015) stated that the causative factor that can be delivered by caesarean section is when vaginal delivery may have a risk to the mother and baby such as taking too much time for delivery, fetal disorders, or because the baby is in an abnormal position. 10 classification points Robson recommended by the WHO for caesarean section delivery is the number of previous pregnancies, whether the baby is a fetal presentation, gestational age, previous uterine scars, number of babies, and how delivery begins, if there any of these factors are found within, pregnant women can be sent to deliver Caesarean Section (WHO, 2013).

Based on data from Riskesdas, (2013) that there are various factors related to Caesarean section delivery are quintile of ownership, residence, work and education. According to Riskesdas, Basic Health Research, (2010), the factors influencing delivery of Caesarean section are age at birth, birth order, distance of birth, place of residence, education, employment, level of per capita expenditure.

Caesarean Section delivery is performed when maternal and fetal conditions are complicated at the time of delivery. Cesarean delivery is done with the aim to save the mother and baby so that they can be handled properly (Cunningham , Gant, Lenovo, & Gilstrap, 2012).

The reasons of doing caesarean section are multifactorial, including changing the profile of mothers who give birth, changes in cultural, social and obstetrical risk management that are tightly stringent. More than 90% of the indications for delivery of cesarean section are relative and delivery of sectio caesarea at the demand of the mother. These reasons are the cause for the increase in the integration of caesarean section (Stützer, Berlit, Lis, Schmahl, Sütterlin, & Tuschy, 2017). Wang, Hellerstein, Hou, Zou, Ruan, & Zhang, (2017) also found that maternal demand can cause high cesarean section delivery in hospital.

Based on data taken from Dinas Kesehatan Yogyakarta in 2014 there were 45,937 deliveries. The number of Caesarean section delivery was 7213 mothers, Among others, Bantul Regency with the number of deliveries of 13,738 with the number of Caesarean Section deliveries, 2,936 maternity mothers

Such as Bantul Regency about 13,738 number of deliveries of with Caesarean Section, 2,936 childbirths, Kulon Progo Regency from 5,688, 762 deliveries used Caesarean section delivery, Sleman District 13,448, 1,492 deliveries with caesarean section, Gunung Kidul District 8,414 deliveries and 614 childbirth used caesarean section, and the last is the District of Yogyakarta City from 4,660 deliveries, 1,332 deliveries used Caesarean Section (Dinkes, 2014). The purpose of this study was to determine the relationship of maternal demand with caesarean section delivery at PKU Muhammadiyah Hospital Bantul.

## RESEARCH METHODS

The type of research used in this study is quantitative research with Cross Sectional approach. The independent method variable in this study is maternal demand. The variable in this study was Caesarean section delivery. Data collection in this study used secondary data that medical record of PKU Muhammadiyah Hospital Bantul 2017. The population in this study were all mothers who had delivered Caesarean section at PKU Muhammadiyah Hospital Bantul in Yogyakarta in 2017.

Sampling is done by simple random sampling technique, that is taking members of the sample from the population randomly without regard to the strata in the population.

The number of samples is determined by using the Slovin formula for estimating the error of 5% with the number of 179 respondents.

Univariate analysis was carried out to describe the characteristics of each variable and bivariate analysis was performed to test the hypothesis, bivariate analysis using chi-square statistical test with 95% confidence level ( $\alpha = 0.05$ ).

## RESULTS AND DISCUSSION

### Univariate Analysis

**Table 1.** Characteristics of respondents based on done for delivery of caesarean section

No	Indication	Frequency	%
1	Not Done	45	25,14
2	Done	134	74,86
<b>Total</b>		<b>179</b>	<b>100</b>

Secondary data 2017

Based on data from 1 respondent who had medical indications, more caesarean section delivery was 134 (74.86%) than respondents who did not have medical indications.

**Table 2.** Characteristics of respondents based on maternal requests for delivery of caesarean section

No	Mother's Demand	F	%
1	Demanded	41	22,90
2	Not demanded	138	77,10
<b>Total</b>		<b>179</b>	<b>100</b>

Secondary data 2017

Based on Table 2, it can be seen that 41 respondents asked for fewer (22.90%) compared to 138 respondents who did not ask (77.10%).

**Table 3.** Relationship of maternal demand with cesarean delivery

No	Data Description	Delivery for SC				Total	(%)	95% CI	P Value
		Not done		done					
		Frequency (F)	(%)	Frequency (F)	(%)				
1	No asking for SC	44	31,88	94	68,12	138	100	2.493-140.629	
2	Demand	1	2, 43	40	97,57	41	100	0.000	
Total		45		134		179			

Based on table 3 it showed that out of 138 respondents who did not ask for 94 (68.12%) who delivered caesarean section, and from 41 (22.90%) respondents who asked for there were 40 (97.57%) respondents who delivered caesarean section. Based on these data it was found that respondents asked were higher than respondents who did not ask, with that the results of p value of 0.000 <0.05 and the ci value is 2.493-

140.629. it shows that there is a relationship between maternal demand and delivery of caesarean section.

Based on the analysis of the variable demand of mothers with Caesarean Section delivery at PKU Muhammadiyah Hospital Bantul from 179 respondents, it was found that 41 (22.90%) respondents asked for delivery of Caesarean section. and 138 (77.10%) who did not ask to caesarean section delivery.

According to the researcher, the number of respondents who delivered caesarean section on without any reason from respondent's request was more than the number of caesarean section deliveries on the grounds of the request of the respondent.

The results obtained by the researcher are in line with the research conducted by Bayou, Mashaalla, & Tshweneagae, (2015) which is one of the causes of caesarean section delivery is the request of the mother or family.

The same research results were also found in the study (Santas & Santas, 2018) namely the causative factor of the delivery of the non-medical caesarean section, one of which is the request or demand from the mother.

### **Relationship between mother's demand and delivery of caesarean section**

Caesarean section delivery was done merely because of maternal demand without any fetal indications that increase consideration of benefit, risk, and ethical concerns for health care providers. Appropriate counseling from health officer to patients is very important. The provider must have a clear knowledge of the risks and benefits of providing a section caesarean delivery on the grounds of the mother's request (Alsayegh, Bos, Campbell, & Barrett, 2018).

Cesarean section is needed for primary obstetrics to save the lives of mothers and babies from pregnancy and childbirth-related complications. However, performing the cesarean section without something urgent can have a devastating effect on mothers and newborns (Begum et al., 2017).

Childbirth caesarean delivery is surgical performance, childbirth caesarean delivery has risks associated with surgery and anesthesia. Caesarean section delivery is due to emergency maternal and sexual conditions, there are large medical, obstetric and fetal complications (Alsayegh, Bos, Campbell, & Barrett, 2018).

The number of women who understand MDCS is 39.6%. The amount is taken from the type of health and education facilities. Women who have higher education and from THC are understand more about MDCS than others ( $P = 0.001$ ). The main sources of information about MDCS are divided into two: doctors (30.8%) and friends (24.3%). The cause of MDCS is reported to be divided into four, the first is due to fear of labor pain (68.9%), the second is fear of birth outcomes (60.1%), the third is fear of fecal (20.2%), and finally due to incontinence of urine (16.8%). Compare to other facility users, most women who get THC services ask for MDCS to be granted but only a few were willing to ask for MDCS (6.6%) because 50% of those who asked for MDCS to be granted were not permitted by their husbands. In multiple logistic regression, compared to SHC or PHC, respondents at THC were significantly more likely to request cesarean section and to defend women's freedom to choose the way they like to give birth (Okonkwo, Ojengbede, Morhason-Bello, & Adedokun, 2012) .

In the researcher opinion, the quantity of respondents who did not ask for caesarean section deliveries is more compared to respondents who asked for caesarean section

delivery, this is because respondents rational reasons must be reviewed and should be discussed. The mother's reason for asking for Caesarean delivery was for women who gave birth based on previous experience, mothers who wished to electectomy Caesarea in an elective manner because they were afraid of their baby having an injury or asphyxia during delivery, but the patient's decision must be respected and needed to be offered other options for delivery. (Rasjidi, 2009).

In the opinion of Society of Obstetricians Gynecologists of Canada that when a person asks for a caesarean section delivery, their reasons must be explored thoroughly. The process of counseling and decision making must really be thought about for a while. The reasons that must be highlighted are the values, fears or worries of the person that causes the mother to ask for a caesarean section. Social and cultural changes, scientific progress, and medicolegal considerations are probably the main reasons for the increased acceptance of cesarean delivery. However, cesarean delivery should only be carried out if it is clearly beneficial (Mylonas & Friese, 2015).

### CONCLUSION

The conclusion of this study is that the frequency of respondents who asked for caesarean section deliveries were more likely to have delivered Caesarean section compared to mothers who did not request Caesarean section. The results of the study showed a significant relationship between maternal demand for delivery of Caesarean section with p value of 0,000.

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