

# Efectiveness of Patient Centered Care in Reduce Anxiety Level and Improve Satisfaction on Patient Post Cesarean Section

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**Background:** Patient Centered Care (PCC) has become one of the standard services in hospitals in support of the Government of Indonesia's National Program, one of which is reducing maternal and infant mortality and improving maternal and infant health. Not much research on PCC in Indonesia, especially related to the effectiveness of PCC application in reducing the level of anxiety and improve patient satisfaction after Cesarean Section surgery. **Methods:** This study was an Experimental Quasi, involving 30 respondents (controls) and 30 PCC respondents (intervention) in postoperative Cesarean Section patients. The research instrument used a State Anxiety Inventory and SERVQUAL modification methods questionnaire. The research was conducted in RS PKU Muhammadiyah Bantul on June-August 2018. Data analysis using independent sample t-test. **Results and Discussion:** From the measurement results of different test levels of anxiety from the control group (mean = 62.8571) and PCC (mean = 45.4667) showed the results of sig. 2-tailed = 0.001, and the test of the level of satisfaction between the control groups (mean = 76.3143) and PCC (mean = 84.9677) was obtained by sig. 2-tailed = 0.003. Different tests are said to be meaningful if p value <0.05. **Conclusions:** There are differences in anxiety levels and significant levels of satisfaction in both groups. The results showed that PCC can reduce anxiety levels and increase patient satisfaction.

Keywords: Patient Centered Care, Anxiety, Satisfaction, Cesarean Section

## BACKGROUND

The Cesarean Section is one of the major interventions in the part of obstetrics to save the lives of mother and baby from complications related to pregnancy until childbirth (1). Although the World Health Organization (WHO) has assign the average Cesarean Section standard in a country is about 5-15% of the population and the Cesarean Section is considered a large and risky intervention in the obstetric action (2), WHO data shows that there is an increasing number of Cesarean Section surgery, which is 18.5 million CS

surgeries performed annually around the world. About 40% of countries have CS levels <10%, about 10% have intermediate CS levels 10-15%, and about 50% have CS level >15% (3).

54 countries have CS <10% globally at 25% (4.5 million) or 60% (77 million) of the world's births. While for the CS level >15% is found in 64 countries with CS count of 37.5% (48.4 million) of total number of births occurred. WHO estimates that there will be an increase in CS number of 3.2 million in 54 countries with CS levels <10%. Most of these

countries are from Africa (68.5%), Asia (29.6%) and 1 country from Latin America and the Caribbean (3).

This can not be separated from factors such as mood, anxiety and fear of spontaneous birth, so many mothers tend to opt for Cesarean Section elective surgery. Cesarean Section often causes symptoms of depression and anxiety is high. However, little is known about changes in depressed mood and anxiety over time among women undergoing CS elective (2).

Surgical action as Cesarean Section is an action with potential and actual threats for a person. It can create anxiety when it comes to dealing with it, resulting in an uncomfortable feeling, anxiety or fear. Psychological responses such as anxiety will affect the patient's clinical outcome (4). A WHO cohort study in 2005 on the prospect of maternal and perinatal healthcare for 410 randomized health facilities in Latin America showed that mothers undergoing Cesarean Section deliveries were found to significantly increase maternal morbidity (5). Therefore, the government creates a National Program that aims to reduce maternal and infant mortality and increase maternal and infant health rates.

Patient Centered Care (PCC) is both a goal and a tool used to improve health outcomes. In health care services,

the application of PCC is diverse (6). The meaning of PCC is to show patients as unique individuals, appreciate their values and beliefs and to respond flexibly to their needs and preferences (7,8). Previously there have been several PCC-related studies in improving outcomes, patient satisfaction (9,10), adherence (11), quality of life (12), and reduced use of many and ineffective medical services (13).

With the interest of healthcare organizations, institutions and public institutions at PCC in the last few decades making efforts to determine and measure PCC outcomes are more important (14). With that reason also researchers interested in conducting research on the effectiveness of Patient Centered Care in reducing anxiety levels and improve patient satisfaction after Cesarean Section surgery. Based on this it can be formulated research problems as follows: "Is Patient Centered Care effective in lowering anxiety levels and improve patient satisfaction after Cesarean Section surgery?".

## **MATERIAL AND METHODS**

The method used in this research is Quantitative Analitic with Quasi Experiment approach. The method is to obtain information that approximates the results obtained with actual experiments in circumstances where it is not possible to

control and / or manipulate all the relevant variables. This research was conducted in RS PKU Muhammadiyah Bantul in June-July 2018.

Through the calculation result of amount population Cesarean Section surgery, obtained sample amount 66 respondents. The selected sample must meet the inclusion and exclusion criteria. The inclusion criteria as the sample of this study were inpatients at least 3 days, adults (> 18 years), able to communicate well and willing to be respondents. While the exclusion criteria, ie never undergoing treatment in the ICU / ICCU room, did not experience any disturbance of consciousness and not the employee or the hospital family in the study area.

The study compared two groups, controls and PCC interventions. The variables measured in this study are anxiety and satisfaction as independent variable. Measurement of anxiety levels using State Anxiety Inventory (SA-I), which consists of 14 question items and is divided into 2 types of questions, favorable (positive) and unfavorable (negative). While the measurement of the level of satisfaction using SERVQUAL modifications are divided into 5 dimensions, consisting of reliability (trust), responsive (responsiveness), assurance (safe), empathy (empathy) and tangibility (real). At the beginning of the research the

will conduct Focus Group Discussion (FGD) with professionals in the hospital related to the formation of PCC team and discuss the concept of PCC implementation. The PCC team who had been given material on PCC intervened by conducting FGDs on the care that would be given to each intervention group patient, then doing a team visite. The team's visite consists of obstetrics and gynecology specialists, midwives or nurses and pharmacists.

To ensure good intervention, researchers directly review the process of applying Patient Centered Care to patients from patient admission to postoperative. If the application of Patient Centered Care has been applied properly, the researcher begins to give satisfaction questionnaire to the respondent after Cesarean Section which has been chosen as the sample (primary data). In the conventional group (control) also performed data retrieval in the same way. After the data is collected it will be analyzed used Independent T-Test through spss application.

## **RESULTS**

### **1. Hospital Profile**

PKU Muhammadiyah Bantul is a type C hospital located in Bantul district, DI Yogyakarta. RS PKU Muhammadiyah Bantul has 24 hour service, covering emergency, inpatient, outpatient

polyclinic), laboratory, surgical service, high risk perinatal room, delivery room, post partum room, ICU, PICU and HDNC, trauma center, hemodialysis and CAPD (Continous Ambulatory Peritonal Dialysis).

Other services, RS PKU Muhammadiyah Bantul also has services: free drug test, pregnancy exercise, drug information service, home care service, general medical check up (GMMC), Islamic spiritual guidance service, and nutrition consultation.

PKU Muhammadiyah Bantul Hospital has 139 beds (TT) consisting of VIP room 16 beds, main room 7 beds, class I room 22 beds, class II room 32 beds, class III room 60 beds and 2 beds observation room.

## 2. Respondents Profile

The study involved 66 respondents who met the inclusion and exclusion criteria. Profile of respondents attached in this study were age, education, occupation, health insurance, birth history and CS history. By age (Table 1), respondents aged  $\leq 20$  years were 1 person (1.51%), aged 21-25 years were 13 (19.69%), aged 26-30 years were 8 persons (12.12 %), aged 31-35 people totaling 26 people (39.39%), aged 36-40 years totaling 10 people (15.15%) and  $> 40$  years totaling 4 people (6.06%).

According to the data of respondents, most of the respondents have the last high school education that is 31 people or equal to 46.96%. The rest had the last education of elementary school 2 respondents (3.03%), junior high school 5 respondents (7.57%), diploma 6 respondents (9.09%) and 22 bachelor respondents (33.33%).

**Table 1. Percentage of respondents by age, education, occupation and health insurance**

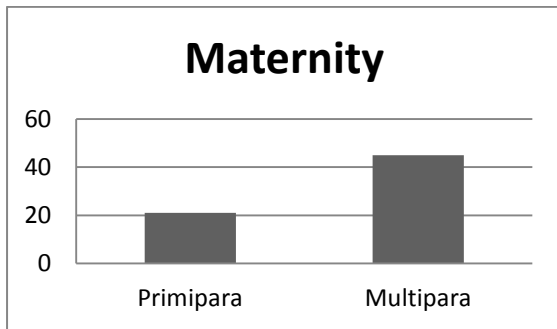
	Frequent	Percent
<b>Age (years old)</b>		
$\leq 20$	1	1,51
21 – 25	13	19,69
26 – 30	8	12,12
31 – 35	26	39,39
36 – 40	10	15,15
$\geq 40$	4	6,06
<b>Education</b>		
Elementary school	2	3,03
Junior high school	5	7,57
Senior high school	31	46,96
Diploma	6	9,09
Bachelor	22	33,33
<b>Occupation</b>		
Housewife	38	57,57
Civil servant	8	22,22
Employees	8	12,12
Entrepreneur	12	18,28
<b>Health insurance</b>		
BPJS	60	90,90
Non BPJS	6	9,90

(Source : primer data processed)

In the table above (Table 1), it is known that most of the respondents are housewives (38 people or 57,57%), 8 person (12,12%) work as civil servant, 8 person (12,12%) work as employee and 12 persons (18.18%) work as enerpreneur. Meanwhile, when viewed according to

health insurance used, it is known that 60 respondents or the equivalent of 90.90% are users of BPJS, while respondents who do not use health insurance amounted to 6 respondents or 9.90%.

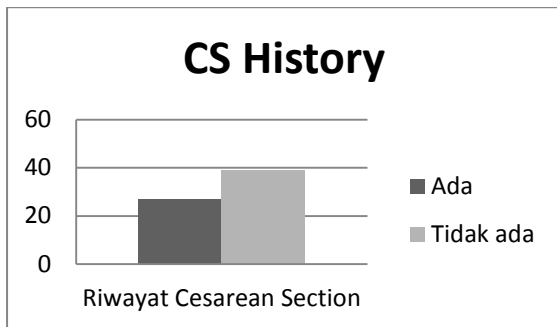
**Diagram 1.1. Percentage of Maternity.**



(Source : primer data processed)

Diagram 1.2 shows that 68% of respondents (60 persons) are multiparous and 32% of respondents (6 persons) are primiparous.

**Diagram 1.2. Percentage of CS history.**



(Source : primer data processed)

Of all samples, 39 respondents or 59.09% had never undergone CS surgery and the rest 27 respondents or 40.90% had a history of labor through CS surgery.

### 3. Validity and Reliability Test

Validity and reliability test instrument performed in RS PKU Muhammadiyah Bantul to 20 respondents.

An instrument is said to be valid if  $R$  count  $>$   $R$  table.  $R$  table used in this test is 0.444. Based on the results of validity test that has been done on both instruments, item question instrument SA-I which can be used to assess anxiety in this research is 14 items with  $R$  value count 0,475-0,738. While the satisfaction instrument that SERVQUAL has 20 items that are valid with  $R$  count 0,451-0,909.

For reliability tests of both instruments, Cronbach's Alpha values of SA-I and SERVQUAL were 0.942 and 0.955, respectively. This indicates that both instruments are reliable.

**Table 2. Result of validity and reliability test**

Item Test	Validity	R table	R count	Item
SA-I		0,444	0,475–0,738	14
SERVQUAL		0,444	0,451–0,909	20
Item Reliability Test	Standar	Cronbach's Alpha	Item	
SA-I	0,630	0,942	20	
SERVQUAL	0,630	0,955	22	

(Source : primer data processed)

## 4. Data Analysis

**Table 3. Result of data analysis anxiety level and satisfaction level.**

	Sig standard	Sig (2-tailed)
Anxiety level	0,005	0,001
Satisfaction level	0,005	0,004

(Source : primer data processed)

Data were obtained from 66 respondents, consisting of 35 control group respondents and 31 respondents of

PCC intervention group. The data obtained is then processed using the Independent Sample T-Test.

Based on the results of the analysis shows that the level of anxiety in both groups of respondents have sig. (2-tailed) 0,000 ( $p > 0.005$ ) with an error rate of 95%.

Not much different, the results of the analysis for the level of satisfaction between the control group and the PCC intervention group had a sig. (2-tailed) 0.004 ( $p > 0.005$ ) with a 95% error rate.

## **DISCUSSION**

CS there is a major surgical procedure. These actions are chosen under stressful conditions such as bleeding management, fetal distress, hypertension and cephalopelvic disproportion (15). Depression and anxiety are very common during labor and have a major impact on maternal and infant outcomes. Increased symptoms of anxiety are estimated to occur in 54% of women during pregnancy. Whereas in the postpartum period, anxiety occurs in 30.7% (2). WHO pays attention to services for mothers and children, so as to reduce the amount of mortality in martena WHO recommends to increase the availability, access, quality, and use of services for management and treatment of complications of pregnancy, childbirth, and postpartum (16).

Patient Centered Care PCC is a goal as well as a tool used to improve health outcomes (6). Patient Centered Care (PCC) is a form of service that prioritizes the needs and desires of patients. As well as giving patients an understanding and support for making decisions about the treatment received. This requires a good relationship between doctor, patient and family (13). The essence of PCC is holistic health care and is a development of traditional care (17). PCC is a form of service that prioritizes the needs and desires of patients, and gives patients understanding and support to make decisions about the treatment received. There is a shift regarding the focus of Patient Centered Care from time to time (9). Patient Centered Care improves the quality of care for patients because the focus of care no longer lies in the completion of tasks but personal adjustment (7). This requires a good relationship between doctor, patient and family (13). Research also shows that applying Patient Centered Care can improve patient outcomes and patient satisfaction. One of them is research conducted by Hobbs (9).

## **CONCLUSSION**

There were significant differences in anxiety and satisfaction levels in the group receiving Patient Centered Care

(PCC) services and the control group. It needs a commitment from hospital health personnel to implement PCC without supervision because PCC has become the National Standard of Hospital Accreditation (SNARS) 2018. It aims to improve hospital services.

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