

Characteristics Sectio Caesaria under National Health Insurance Program at the Non Profit Referral Hospital in Jakarta

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Abstract

Background: Sectio Caesaria (SC) at the hospital in 2014 to 2017 ranks in the 10th highest cases and costs of claim under the Indonesia National Health Insurance (JKN) program. The World Health Organization (WHO) sets the optimum SC rate of 15% by deliveries. This study aims to identify the socioeconomic and clinical characteristic of women with SC and its relationship with JKN program at the Non-Profit Referral Hospital.

Method: This research is a retrospective study with cross sectional design using a quantitative approach. A total sample of 385 cases of SC were taken from the hospital medical records in the period January 1-31 December 2018. Using univariate and bivariate-Chi Square analysis

Result: The proportion of women with SC under JKN was 67.63% whose were 57.7% received contribution assistance/PBI. Mostly in room class 3 (51.9%). Most referrals were from government primary public clinic/ Puskesmas (53.8%). Women's education mostly was high school (56.2%) with the age between 21-34 years (68.1%). Gestational ages between 37-40 weeks (72.3%) with a history of one childbirth/ primiparous (55%). ANC outside the hospital more often underwent SC (53.5%). There was a significant relationship between socioeconomic and clinical characteristics women SC under JKN at the Referral Hospital ($p < 0.05$; CI: 95%).

Conclusion: The proportion of SC deliveries at the Referral Non hospital exceeds the standards set by WHO. There is a significant relationship between socioeconomic and clinical variations mothers with SC under JKN. Quality control of SC delivery services needs to be done routinely and continuously through the application of service standards and perinatal maternal audit activities.

Keywords: SC, Socioeconomic and Clinical Characteristics, JKN

Introduction

The delivery service at the hospital for three years in a row in 2014-2017 since the JKN program was launched showed that cases and costs were the highest claims. 55% of total deliveries were SC deliveries⁽¹⁾. WHO sets the average SC standard for all countries of 10-15% per deliveries, while in government hospitals an average of 11% and in private hospitals is more than 30% (Pandya et al., 2015). Demographic and Health Indonesian Survey Data in 2012 to 2017 also showed an increase SC from 7% to 17% of total deliveries. DKI Jakarta Province is the highest with SC proportion⁽²⁾. The proportion of SC birth rates in Indonesia continues to increase in both

public and private hospitals⁽³⁾. Referral hospitals in this study have collaborated with JKN since 2014. Based on the description above, researchers are interested in identifying socioeconomic and clinical variations of mothers with SC in the JKN program at the Referral Hospital.

Methodology

This research is a retrospective study with a cross sectional design using a quantitative approach. A total sample of 385 SC deliveries was taken from the medical records in the January 1 - 31 December 2018 period. Type C hospitals were chosen because they are

a referral for SC deliveries. Hospital Ownership Type is Non-Profit. The research location was selected by one hospital which has the highest number of SC JKN claim and located in the center of city Jakarta.

Variable socioeconomic characteristic were type of JKN membership, room class, referral, education, and occupation. Clinical variables include maternal age, gestational age, parity, history of Antenatal Care (ANC). Data analysis was presented univariately and bivariate with the Chi Square test.

Validity and Reliability

The research checklist questionnaire was based on medical record records which were standard assessment tools before SC delivery at the hospital. The medical record enumerator consisted of midwives and D3 educated hospital management. Data collection was carried out through stages including: enumerator training, followed by filling in research instrument check lists by enumerators.

Result

The Non Profit Hospital is a public referral type C hospital. It has 147 beds with two operating rooms. There are 13 Obstetrics and Gynecology Specialists and 128 midwives. Total deliveries in year 2018 were 4781. The proportion of SC of total deliveries under JKN 67.63%.

Table 1 the result of Chi square test showed variations in the socioeconomic characteristics of women with SC under JKN and Non JKN in hospitals. It indicated that mostly were women with contribution assistance/PBI at 57.7%. Room class 3 is 51.9%. Referral patients were from government primary public clinic Puskesmas (53.8%). Women with SC were educated mostly in high school (56.2%) and housewives (69.6%).

Table 1. Proportion of Socio Economic Characteristics Women with SC At Non-Profit Referral Hospital Period January-December 2018

Variable			Insurance				Chi Square
Social Economy N %			JKN (260)		Non JKN (125)		p
			N	%			
Type JKN	PBI		150	57.7	0	0	0.0
	Non PBI		110	42.3	0	0	
RoomClass	Class 1 /VIP		73	28.1	125	100	0.0
	Class 2		52	20	0	0	
	Class 3		135	51.9	0	0	
Refferal	Puskesmas		140	53.8	3	2.4	0.0
	selfwillness		75	28.8	103	82.4	
	Private Clinic		45	17.3	19	15.2	
Education	Elementary		12	4.6	4	3.2	0.1
	Junior		30	11.5	9	7.2	
	HighSchool		146	56,2	43	34.4	

Cont.... Table 1. Proportion of Socio Economic Characteristics Women with SC At Non-Profit Referral Hospital Period January-December 2018

		Diploma	33	12.7	17	13.6	
		Undergraduate	38	14.6	48	38.2	
		Graduate	1	0.4	4	3.2	
	Occupation	Housewife	181	69.6	68	54.4	0.0
		Private	9	3,5	8	6.4	
		Private Employee	57	21.9	43	34.4	
		Government Employee	8	3.1	4	3.2	
		Medical Doctor	3	1.2	1	0.8	
		Nurse	2	0.8	1	0.8	

Table 2 indicate variations in clinical characteristics of women with SC under JKN in hospitals mostly done in the group age 21 - 34 years (68.1%). Gestational age between 37 - 40 weeks (72.3%) and dominant primiparous parity (55%). Women who did ANC outside the hospital more often underwent SC (53.5%). The percentage of normal placenta is 90.8%.

Table 2. Proportion of Clinical Characteristics of Women with SC at Non-Profit Referral Hospital Period January-December 2018

Variable		Insurance				Chi Square
Clinical		JKN(n=260)		Non JKN(n=125)		p
		n	%	n	%	
Age	≤ 20 / ≥ 35 year	83	31.9	29	23.2	0.07
	21 year-34 year	177	68.1	96	76.8	
Gestational	37-40 week	188	72.3	96	76.8	0.07
	<37week&>40week	72	27.7	29	23.2	
Parity	Primiparous	143	55	78	62.4	0.10
	2-3 Anak Hidup	111	42.7	41	32.8	
	>3 Anak Hidup	6	2.3	6	4.8	
ANC	ANC luar RS	139	53.5	42	33.6	0.0
	ANC di RS<4x	60	23.1	46	36.8	
	ANC di RS>4 x	61	23.5	37	29.6	

Discussion

Most of the SC deliveries at the Non Profit Referral Hospital were under JKN (69.7%). The increase in the number of SC is not in line with the government's call for efforts to reduce childbirth with the SC by Ministry of Health which states the number of SC for Educational Hospitals or Provincial Referrals fell to 20%, while for private hospitals not more than 15%⁽⁴⁾. The increasing coverage under JKN program has indeed been aligned with national policy and strategy directions of National Medium-Term Development Plan (RPJMN) by 2019 through the National Social Security System (SJSN) in the Health Sector. But this situation is certainly not in line with the Policy of MoH No.43 of 2016 and the Regulation of MoH No. 4 of 2019 related minimum service standards carried out at health facilities owned by the central government, regional government, and the private sector regarding of health service standard quality.

Indonesia Law No. 40/2004 states that JKN aims to JKN participants get the benefits of health care and protection of basic health needs in government or private health facilities that work together with BPJSK. Women delivery with SC is one the benefits felt by JKN participants. It covers without any limit on the number of pregnancies, pregnant to any age can still use this service and is not limited to membership status. The large number of Women delivery by SC will have consequences on health funding which are relatively higher than normal deliveries. The cost of SC reaches twice the cost of labor with instrumental / equipment and 2-3 times higher than the cost of vaginal delivery⁽⁵⁾. If the number of SC increases, the government burden on health financing will also increase. The total health costs subsidized by the Government in developing countries are significantly related to SC.⁽⁶⁾

There is a significant relationship between variations of characteristic socioeconomic and clinical women with SC delivery under JKN program ($p < 0.05$; CI: 95%). Women with SC deliveries under JKN in RSNP were mostly in class 3 (51.9%). Non PBI patients were more SC delivery (57.7%). Most referral from Puskesmas. It shows that referring patients in the JKN era was more in line with clinical authority than before JKN implementation. Clearer rules (PPK I) about the clinical authority those outside the authority are classified in the referral indication. However, the quality of referral indications by referral health workers needs to be re-

evaluated to be able to see the effectiveness of referral quality. Study showed the increase in women with SC deliveries were affected by age, education, socio-cultural and socioeconomic. The prevalence of SC is influenced by higher education, multiparty, non-indicative SC selection and clinical care during pregnancy at the hospital or private doctor⁽⁷⁾. Social, cultural and policy changes and psycho-social factors like anxiety about childbirth and maternal desire also influence the attitude of decision makers in carrying out SC for both patients and doctors. Agreement on indications for SC has changed in many countries⁽⁸⁾.

The results of the Chi-Square statistical test showed that there were differences between the clinical characteristics of mothers with SC deliveries under JKN and Non JKN at Non-Profit Referral Hospitals. Mothers with SC under JKN mostly were 21-34 years age group (68.1%). Gestational age between 37 weeks - 40 weeks at RSNP (72.3%). The condition of the placenta were normal placenta (93.3%). Parity were mostly are primiparous (55%). ANC done by the women with SC were outside the hospital (53.5%). This study differ from research by Sihombing using data from the National Health Research (2) which states that the age of women with SC deliveries were above the age of 35 years is 1.68 times more likely to have deliveries SC compared to those who age range of 20 -35 years and gestational age more than 42 weeks (post-term) 1.97 times more likely to occur in labor than women with SC deliveries in 38-42 weeks of gestation. As well as the parity variable showed Primiparous mothers were 2.49 times more likely to have labor in the SC than mothers with multipara grandes. Incomplete ANC likely SC deliveries when compared with women who performed a complete ANC.

Proportion SC deliveries in Non Profit Referral Hospital exceeds the standards set by WHO which need to be controlled. Novianti, et al (2) research shows a relationship between financing and SC where mothers with health insurance show 1.12 times more likely to deliver SC than those who do not have health insurance. A study conducted by WHO in 2007 in Alexandria, Egypt showed that the chance of labor through SC is greater for expectant mothers who have health insurance or insurance and in hospitals or health care facilities that have collaborations with health insurance or insurance

providers.

Technical standardization of services becomes very important in the process of providing a qualified health service beside the cost control of health services as a concern. The Corporate Governance System in a Non Profit Referral Hospital aims to ensure that the hospital mission can run as efficiently as possible⁽⁹⁾. Health care service financing policies can influence the management and delivery process that can encourage pragmatism among doctors who have no moral objections to non-medical SC operations⁽¹⁰⁾. In the JKN era, it is expected that practitioners such as doctors at various levels of health services for encouraging mothers and families to fully understand the risk of SC deliveries, so that ownership of health insurance does not encourage an increase in the trend of SC births in Indonesia.

Monitoring and evaluating the standardization of SC services as a form of service quality control in hospitals through Clinical Pathway, fixed procedures, performance appraisal, clinical training and perinatal maternal audit activities needs to be done routinely and continuously in order to ensure the sustainability of the JKN program.

Ethical Clearance: This research has been through an ethical review procedure by the Ethics Commission for Research and Community Health Services, Faculty of Public Health, University of Indonesia. This research was declared to have passed and was feasible to be carried out with No: Ket-489 / UN2.F10 / PPM.00.02 / 2019 on June 24, 2019.

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Conflict of Interest : The authors declare that there is no conflict of interests.

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