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Research Article

**RATE OF CESAREAN SECTION AMONG VARIOUS GROUPS
OF OBSTETRICIANS**¹Dr Sundas Manzoor, ²Dr. Muhammad Waleed Ghous, ³Dr Sanabil Anwar¹Islamabad Medical and Dental College, ²House Officer DHQ Teaching Hospital Mirpur AJK,³University of Medical and Dental College Faisalabad.**Article Received:** September 2019 **Accepted:** October 2019 **Published:** November 2019**Abstract:**

Objective: The aim of this research work is to assess the rate of CS (cesarean section) among various groups of obstetricians handling the NTSV (Nulliparous-Term-Singleton with Vertex) child birth at Benazir Bhutto Hospital Rawalpindi, for a period of four months.

Methodology: This research work is a secondary examination of retroactive data that assessed the factors influencing the rate of cesarean section of the NTSV females. The patients present with the cesarean section (100) were the participants of the case group and females with normal deliveries through vagina (100) were the participants of the group of the healthy controls.

Results: The average age of the patients was 24.58 ± 4.18 years. The average period of gestation was 38.60 ± 1.0 weeks. Probability of cesarean section was a little bit less in the females who regularly visited the fetal maternal consultants and this rate was a little bit higher in the patients who came under the management of the non-full time faculty. Odds of cesarean sections was high among the consultants with a mean monthly volumes of 21 to 31 patients per month. No finding of the research was much significant statistically. Not significant rise in the danger of cesarean section was present with the enhancement of the awareness as well as experience of the obstetricians.

Conclusion: The findings of this research work were not able to show any significant disparity in the rate of cesarean section among various groups of the physicians in obstetric field. The findings show that the management of the labor in accordance with the standard instruction can mitigate the bias of these professionals. There is also need to conduct the multi centers prospective research works for better evaluation of the accurate outcomes.

Keywords: Cesarean, Obstetricians, Vagina, Delivery, Nulliparous-Term-Singleton with Vertex.

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INTRODUCTION:

High rates of cesarean section are a great matter of concern for the whole world. This is also the cause of the high risk to the health of mothers as well as their lives in comparison with the normal deliveries through vagina, with no additional advantages to fetus. Data in these field describes many causes of the increase in the rates of cesarean section. These reasons include rise in the labor induction rates, the preference of females for cesarean section, very few chances of the litigation & relaxed scheduling. For the modification of the practices as well as other aspects influencing the Mode of Delivery, many health care centers utilize rate of cesarean section as an indicator of quality particularly among NTSV. There is variation in the rates of cesarean section among NTSV from 8.28% to 32.18%. The mode of delivery among these females is not simply a most important element of the obstetrics course in future, but it also shows the real statistic for the rate of cesarean section.

There are some non-modifiable indications as main placenta previa, prolapse of cord and mal-presentation and these are in accordance with the practices which are standards. There are also variations depending upon the prevailing conditions. There is a decrease in the variation in high developed regions with the implementation of instruction to regulate the medical practices. In Pakistan, there is no standard standards to administer the labor. The main purpose of this research work is to evaluate the different traits of the obstetricians which are influencing the mode of delivery among NTSV in our institute. This is also very helpful to recognize the practices among various groups of obstetricians which can be a better step to decrease the high rate of cesarean section.

METHODOLOGY:

This research work was a secondary assessment of the information that evaluated the factors influencing the mode of delivery in the pregnancies of NTSV. This

research work was carried out in the gynecology department of Benazir Bhutto Hospital Rawalpindi, after the approval of the ethical committee for the conduction of this research work. The NTSV patients who got admission from January 2018 to April 2018 for labor management and delivered their babies were the part of this research work. The patients who gave birth with a planned cesarean section were not the part of this research work. We collected the data on Performa. We reviewed the medical files of all the patients. We compared the patients who gave birth through cesarean section with the female who gave normal delivery through vagina. There were total 200 patients with 100 females in each group.

The management of the labor is very consistent with the guidelines of the department. These instructions are having updating in accordance with the practice based on the evidences. We entered the description of the labor and delivery mode in the database computer. We analyzed the disparities on the basis of traits of the obstetricians as the total year of experience in this field by the consultant, the mean amount of the patients handled by the consultants per month, consultant status as full time or non-full time, and the expertise of the consultants as fetal maternal consultants for high risk cases. SPSS V.19 was in use for the analysis of the collected information. We calculated the average categorical values as maternal age & duration of the pregnancy period.

RESULTS:

There were total 200 participants of this research work. This research work included 100 females who gave child birth through cesarean section as case group & and 100 females with normal delivery through vagina were the part of the group of healthy controls. The range of the age of females was from 18 to 39 years with an average age of 24.58 ± 2.18 years. The average age of gestation of study population was 38.60 ± 1.0 weeks as mentioned in Table-1.

Table-I: The Percentage Distribution of Variables of NTSV Patients (N=200).

Characteristic		Mean \pm SD
Demographic	Maternal age (year) Mean \pm SD	24.58 \pm 2.18
	Gestational Age (Weeks) Mean \pm SD	38.60 \pm 1.00
Risk	Low Risk	157.0 \pm 82.38
	High Risk	31.0 \pm 13.58
Vol of Patients / month	10 or less	21.0 \pm 8.78
	10 - 20	79.0 \pm 36.18
	21-30	37.0 \pm 16.38

	More than 30	67.0 ± 30.48
Faculty	Non-fulltime faculty	67.0 ± 30.48
	Fulltime faculty	141.0 ± 65.48
Faculty Experience	Up to 12	60.0 ± 27.18
	13-17	50.0 ± 22.48
	18-24	66.0 ± 30.8
	>24	28.0 ± 12.18

As provided in Table-1, only 14.0% females gave birth under the complete care of the consultants handling the pregnancies with a high risk. Majority of the patients 36.18% gave birth to their babies under the supervision of consultants with amount from 11 to 20 births every month. The faculty of FT handled 65.48% patients whereas 30.48% females got care of faculty of NFT. Physicians with 18 to 24 years of experience handled 30.8% patients. The possibility of cesarean section in NTSV patient treated by fetal maternal consultant was a little bit less but that was not much significant statistically.

When we compared the obstetricians on their mean patient's volume, odds of cesarean section, in comparison with the normal deliveries through vagina, it was high among the consultants present with 21 to 30 child births in every month than those present with more than thirty deliveries each month. This association was also not much significant. The rate of the cesarean section was a little bit higher in the patients administered by NFT, in comparison with the deliveries through vagina. This was also not much significant. Odds of cesarean section increased to some extent with the rise in the level of experience.

Table-II: Comparison of Caesarean Section and Vaginal Delivery in NTSV Deliveries by Physician Related Parameters

Characteristic		LSCS		Vaginal		Crude OR (95%CI)	P-value
		No	Percent	No	Percent		
Risk	Low Risk	86.0	81.00	89.0	83.78	1.0	0.55
	High Risk	16.0	15.00	13.0	12.18	0.608 (0.178-	
Vol of Patients / Month	10 or less	7.0	6.48	12.0	11.18	0.3688 (0.218-1.338)	0.67
	10 - 20	38.0	35.68	39.0	36.68	0.6738 (0.268-	
	21-30	19.0	17.78	16.0	15.00	1.0488 (0.278-	
	More than 30	34.0	32.00	31.0	29.10	1.0	
Faculty	Fulltime faculty	69.0	65.00	70.0	65.00	1.0	0.661
	Non-fulltime faculty	33.0	31.00	32.0	30.00	1.038 (0.388 - 1.648)	
Faculty Experience	Up to 12	29.0	27.18	29.0	27.18	1.0	0.565
	13-17	21.0	19.68	27.0	25.38	0.588 (0.178-1.468)	
	18-24	34.0	32.00	30.0	28.18	1.118 (0.358-	
	>24	14.0	13.8	12.0	11.18	1.138 (0.278 - 2.528)	

DISCUSSION:

This research work displayed same findings of the rate of cesarean section in various consultant's groups when handling the NTSV females. This was a retroactive research work and we assumed that the present information was correct enough. The outcome of this research work was same with the findings of Manohar S and displayed that the rate of occurrence of

deliveries were not much different among various groups of consultants. That research work compared the normal delivery through vagina with the interventional child births. The rate of cesarean section in this current research work was a little less among the high risk consultants group but it was not much significant. Because we chose only term pregnancies and many patients with high risk may require delivery

before thirty-seven week of pregnancy period. The consultants handling high volumes can easily handle the labor and have less number of cesarean section in comparison with the consultant with very low volumes.

In this research work, the rates of cesarean section among all volumes were consistent. Clapp MA also reported the similar findings that there is no impact of the consultant's experience on the mode of delivery of the patients. This current research work displayed a not significant rise in the rate of cesarean section among patients of non-full time faculty and it was very close to the findings of the McClelland S. The methods of various groups of obstetrician and probability of the cesarean section in the patients were present as same to this research work. Because the management of the labor in our institute was according to the standard guidelines. There is requirement of further research works on larger scale to reach a solid conclusion.

CONCLUSION:

The findings of this research work did not display significant disparities in the rates of cesarean section among various groups of the obstetricians. That might show that the management of the labor in accordance with the standard instructions can mitigate the bias factor from physicians. There is a need of further evaluation with the help of large works involving various centers.

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