

Prevalence of Caesarean Section among Different Castes in Western Nepal

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ABSTRACT

Caesarean section (CS) is a surgical procedure used in the delivery of a baby. Nepal, although being a small country, has people of many different castes with wider socio-economic heterogeneity. Therefore, the objective was to study about different castes of women undergoing CS in Western Nepal. A prospective, cross-sectional study was conducted at Western Regional Hospital of Nepal. The result presented that majority of women undergoing CS were of upper caste group and advantaged janajatis. Brahmin, Chhetri and Gurung caste women were prevalent among those undergoing CS. 42% of women were of 20-24 years and 36% were of 25-29 years. Majority of the women were having a normal gestational age of 36-42 weeks at the time of delivery. 47.9% (n=90) of the women were having their first delivery by CS followed by 35.6% (n=67) having the second. Elective CS was more common than emergency among the upper caste groups and advantaged janajatis. The results suggested that CS is common among the upper caste groups in Western region of Nepal. Proper government policies are necessary to uplift the socio-economic status of disadvantaged women so that health facilities such as CS become available even for women from disadvantaged groups.

Key words: *Caesarean section, Caste, Nepal*

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INTRODUCTION

A CS, also known as C-section or Caesar, is a surgical procedure in which incisions are made through a mother's abdomen (laparotomy) and uterus (hysterotomy) to deliver one or more babies.¹ Incisions are made either horizontally or vertically in the uterus. Horizontal cut in the lower section of uterus is called a low transverse incision. In rare circumstances, vertical or "classical" uterine incision is done. This might be the case if baby is very premature and the lower part of uterus is not yet thinned out enough to cut.²

A C-section may be planned or unplanned. 1) Planned/elective cesarean: An elective caesarean (sometimes called a 'cold section' in medical jargon) is carried out before labour begins.³ CSs are planned when a known medical problem would make labor dangerous for the mother or baby. 2) Unplanned/Emergency cesarean: An emergency caesarean is one that is carried out as a result of some complication arising during labour.³

Like other parts of South Asia, Nepal demonstrates a distinct social stratification based on caste system and encompasses a wider socio-economic heterogeneity.⁴ There are about 36 castes of people residing in the hilly regions of Nepal.⁵ They have been categorized into broader groups giving 5 classes that include: upper caste group, relatively advantaged janajatis, disadvantaged janajatis, dalits and religious minorities.⁶ The dogma of the caste system though, still remains a contentious issue; it continues to act as an obstacle in the development of communities belonging to the lower social class. Main drawback of this caste system is that lower caste people often face a

multitude of disadvantages in socio-economic marginalisation, participation in decision-making processes and employment opportunities.⁷ This ultimately affects the health issues among different groups.

CS has become a common surgical procedure these days. But, due to the lack of education or awareness and poverty among the dalits and disadvantaged janajatis, they have not been able to access the hospital for caesarean delivery. There has been a great difference seen among the different caste groups who undergo CS. Therefore, the aim of the study was to determine the prevalence of CS among different castes in Western Nepal.

MATERIAL AND METHODS

A cross-sectional study was conducted from July 20, 2009 to Sep 20, 2009 including 188 women undergoing CS. Non-random purposive sampling technique was used. The study was carried out at Western Regional Hospital, Pokhara, Nepal. This is the main center for conducting CS in Western Region of Nepal. All women undergoing CS in the study period. Data collection was done by using data collection form. The information about women undergoing CS was retrieved from the information sheet available in the hospital. Since the information sheets were filled by trained health professionals in the hospital, the chances of bias are minimal. We visited the hospital and collected the required data through the use of data collection form. The data collection was done from July 20 to September 20, 2009 prospectively. Ethical clearance was obtained prior to the initiation of the study from School of Health and Allied Sciences, Pokhara University. Data was interpreted using SPSS version 12.0.

RESULTS

A total of 188 women were included in the study. Figure 1 presents the caste code of women undergoing CS. Majority of the women were from upper caste group whereas few were from the disadvantaged janajatis, dalits and religious minorities.

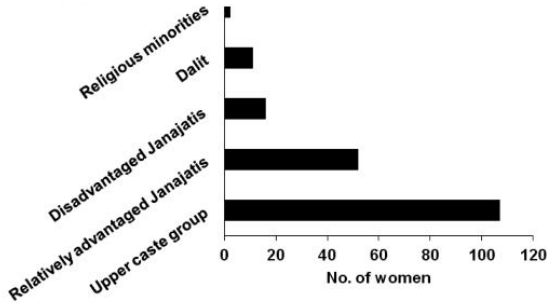


Figure 1: Caste code for women undergoing caesarean section

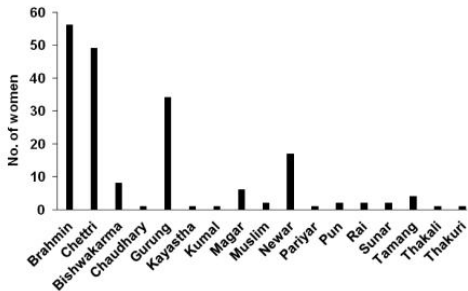


Figure 2: Caste of women

A total of 17 different castes of women went CS as shown in Figure 2. Among them, the majority were Brahmins, Chhetris and Gurungs. The women from disadvantaged janajatis and dalits with castes like Rai, Tamang, Sunar, Pariyar, Bishwakarma were minimum.

Figure 3 represents the age group of women undergoing CS. The mean age of the women was found to be 24.9 years. Majority of the women were of age group 20-24 and 25-29 years who constituted 42% and 36% respectively. With an increase in the age, the number of women undergoing CS was found to decrease.

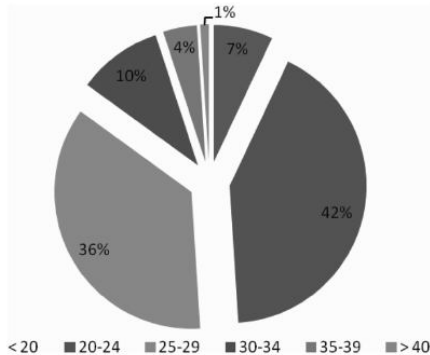


Figure 3: Age group of women undergoing caesarean section

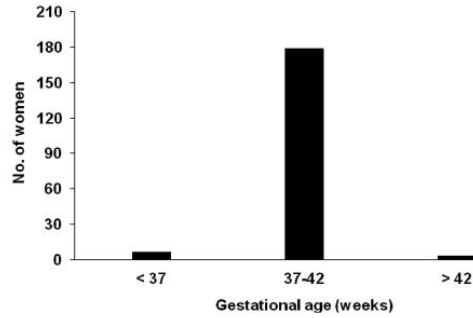


Figure 4: Gestational age at the time of caesarean section



Figure 5: Number of deliveries of women undergoing caesarean section

The normal gestational age for the delivery is 37-42 weeks. The gestational age at the time of CS is illustrated in figure 4. Majority of the women had gestational age of 37-42 weeks with few having more or less than that time.

Out of 188 caesarean deliveries, majority i.e. 47.9% (n=90) were having their first delivery by CS as seen in figure 5. And this is followed by women having their second delivery i.e. 35.6% (n=67). Although, the cases of CS increase with the increase in number of deliveries, but in our study few patients with higher number of deliveries were identified.

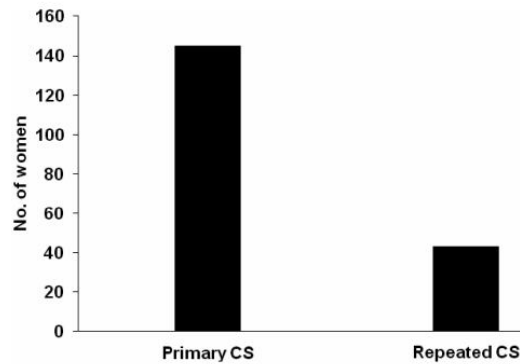


Figure 6: Primary and repeated caesarean section

Primary and repeated caesarean deliveries were seen among the women as shown in figure 6. Majority of the women were undergoing primary CS because of which the number of repeated CS was less.

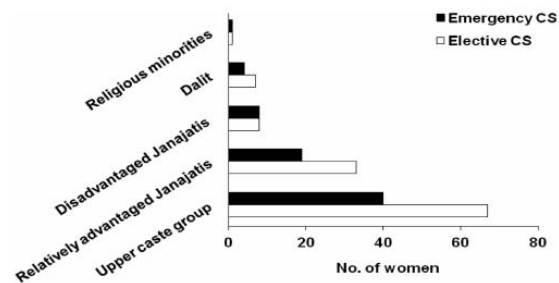


Figure 7: Elective and emergency caesarean section

The number of elective and emergency CS is presented in figure 7. In the groups, the number of elective CS was almost double the number of emergency CS. And the highest number was seen in upper caste groups. This was followed by relatively advantaged janajatis. In case of disadvantaged janajatis, the number of elective and emergency CS was equal.

DISCUSSION

In our study most of the patients undergoing CS were from upper caste and advantaged janajatis group and less were from dalits and disadvantaged janajatis. Mothers who are in a low socio-economic scale deliver at home more frequently in a developing country like Nepal.⁸ Low socio-economic status and the long physical distance of more than one hour to the maternity hospital acted as barriers to the hospital delivery. This might be a reason that dalits and disadvantaged janajatis had less number of caesarean deliveries. As upper caste and advantaged janajatis are of relatively high socio-economic status and have an easy access to hospital, their cases of caesarean delivery are high.

Among the total population of patients 10.1% of the women were of age < 20 years. Pregnancy at young maternal age followed by CS is an important predictor of adverse perinatal outcome for mother and babies.⁹ Another study explains that although pregnant women less than 18 years old were more likely to deliver preterm than older women but

CONCLUSION

This study provides information about the women undergoing CS in western region of Nepal. CS is found to be common among women of higher caste group whereas minority are from dalits and disadvantaged janajatis. Inequalities among the people caused this consequence. Hence, proper government policies in order to uplift the socio-economic status of poor and disadvantaged women should be implicated. Government should provide easy access to the health facilities for pregnant women, especially from disadvantaged groups so that maternal and child health can be uplifted.

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3. Elective and Emergency Caesareans- [cited- 2009, Nov 24]. Available from: <http://www.babyworld.co.uk/information/birth/cesarean/>

have less maternal and perinatal morbidity and were more likely to have normal vaginal deliveries.¹⁰ So, the risk of CS in teenage pregnancy is not well established. Another study done in Nepal shows that the risk of CS is decreased due to higher incidence of low birth weight in teenage pregnancies as this would be associated with a higher chance of successful vaginal delivery. In addition, local gynecologists are reluctant to perform surgical procedures on teenagers.¹¹ Although, there were some women below 20 years, majority of them were from 20-29 years which is appropriate time for conception.

Gestational age is an important predictor to affect the health condition of child. Recent studies have consistently shown higher mortality, increased neonatal morbidity, and worse neuro-developmental and educational outcomes in the infants born before 36 weeks of gestation when compared to those with 37-42 weeks.¹²⁻¹⁵ Since the number of women having delivery at normal gestational age is major, the chances of adverse health effects in children are minimum.

Majority of the women undergoing CS were having their first delivery. Usually, there is increase in the number of CS with increase in age because of complications. But in our study, we found that women having their first delivery by CS were common. The reason behind this might be the perception of the women that they don't need to bear the pain. The other reason might be the doctor's interference making a compulsion for the sake of money. Therefore, the numbers of primary CS were tremendously higher than the secondary one.

The numbers of elective CS were very high as compared to emergency ones in upper caste group and relatively advantaged janajatis. The socio-economic status of women from upper caste groups is usually high that provides easy access to health facilities.⁸ Self decision making capability of them helps in increasing the number of elective CS. On the other hand, the reasons for the emergency CS might be the conditions where the health of mother and child are at a risk.

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