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Community perception regarding Caesarean section in Surat city

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Abstract

Caesarean section (CS) is a surgical procedure which is always helpful to both mother as well as child. Further when if performed in private sector (even in government sector), we can not ignore its economic implications in terms of operative charges, cost of drugs, prolonged hospital stay and loss of wages of the patient as well as the attending family members. It is a cross sectional study including all deliveries occurred in last 3 years in urban area of Surat, Gujarat. The study showed the following:Total 370 deliveries found in study area, out of which 139 were CS. In study area 99 percent of the deliveries were Institutional, Out of all institutional deliveries majority (92.2%) occurred in private sectors. Majority of mothers (98.4%) were not given a choice to decide mode of delivery. Majority of women (97.3 %) preferred vaginal delivery over CS for successive pregnancy. Majority of CS were done on emergency base (86.3%). trial of labour tried only in 63.3 percent cases.

It was concluded that CS rates observed in present study was very high. Further majority of CS in present study were conducted in private sector, which suggest some commercial interest may be at work.

Key words: Caesarean section, Delivery, perception of community

Introduction

Child birth through normal vaginal delivery is a natural process. During delivery ideally there should be no morbidity and mortality to either mother or child but because of various factors involved such as biological, social, environmental etc. the process becomes complicated and need medical assistance in order to ensure a healthy outcome that is delivery of a healthy child and quick recovery of mother with nil to minimum morbidity.[1] Caesarean section (CS) is a surgical procedure which is always helpful to both mother as well as child. It helps in dealing with complicated delivery thus reducing the maternal mortality as well as neonatal mortality and can significantly decrease the maternal as well as infant (mainly neonatal) mortality rates.[1] However, like any major surgeries it has its own side effects and complications.[2] Further when if performed in private sector (even in government sector), we can not ignore its economic implications in terms of operative charges, cost of drugs, prolonged hospital stay and loss of wages of the patient as well as the attending family members. The rise in incidence of caesarean section is more directed to the welfare of baby besides saving the mother from risk of complicated vaginal delivery.[3] What has already been described as the "caesarean birth epidemic" may now well be considered a true pandemic, an emerging issue in mother-child healthcare. A recent leading editorial stressed that the rise in caesarean section deserves international attention, since the trend is no longer confined to only western industrialized countries.[4] Another study done in Chennai (1997 – 88) and

published in 2003 found the CS rates as 32.6 percent in urban population.[5] It is interesting to observe consistently such high CS rates in urban areas while the biological determinants or obstetric indications (for CS) need not to be so high in urban areas. Only thing which can be thought of is the availability of specialist services more in urban areas.[5] In some cases patients are actually not given a choice about the mode of delivery and the uninformed patients are encouraged (pressurized?) to opt for the CS. This can be a possible reason for universally high CS rates in urban areas. [3] Some women ask for a caesarean section because they fear damage to their vagina and to their fetus without there being any medical indication. Rather than indulging in reflex pleas to 'return to the simplicity of nature, we should be concentrating on making caesarean section even safer, researching ways to predict labours that will have an adverse outcome, and listening to what (properly informed) women want.[6] An event occurred on 08-08-08, whereby operation theatres were booked for delivering babies on 08-08-08, with some parents opting for a caesarean delivery exactly at the eight hour of Friday! In fact, consultant paediatricians and neo-natal specialists who remain present during deliveries at hospitals were overbooked. Some of families had chosen this time as the time of birth was determined astrologically by their Guruji. Their child would be a 'perfect 8'. Apparently, the word 'eight' in Chinese is similar to the word wealth or future.[7]

Aims and Objectives

This study was conducted with following aims and objectives.

1. To obtain an estimate of caesarean section rates urban communities of Surat district.
2. To compare the perception of community about caesarean section in urban settings.
3.

Materials and Method

The present study was a cross-sectional population based study and lasted from November 2010 to February 2011. The study was conducted in urban community of Surat city. Data collection was done by house to house survey with semi structured and semi open ended questionnaire.

Inclusion criteria for study: -

Area under the jurisdiction of Surat Municipal Corporation (SMC) excluding the identified slum pockets as they do not reflect true urban situation. Deliveries occurred in last 3 years has been included in study.

From urban area in Surat, central zone (Sagrampura) was selected randomly by lottery method and families were selected serially from the central point of the residential areas of the zone and study conducted covering each house serially and when one street finished the adjacent next street selected for survey and likewise this survey conducted till whole area (Sagrampura) finished. In Surat city, Sagrampura is situated in central zone attached to ring road from Udhana darwaja to Majura gate. It comprises of people mainly of upper and middle class and native of Surat. There are two SMC run maternity homes Kadiwala Health Centre situated at Navsari bazaar road and Kshetrapal Health Centre situated at Kshetrapal temple road. New Civil Hospital of Surat is just 500 meters away from Sagrampura.

Only those houses could not be covered which were found locked. Data was collected from mothers and family members for deliveries in family during last 3 years. Data was collected on a semi-structured, semi open-ended proforma after explaining the concept of study to family members and taking verbal consent. Subsequently, all the data were entered into a master chart and then entered in MS-Excel, from where it was transferred to SPSS software. Subsequently appropriate test of significance were applied to delineate the predictors for CS in community.

Result

Total number of house hold surveyed were 1249. Total population covered was 7456. Total 1463 eligible couple found and among them total 381 deliveries found in last 3 years but data related to 11 deliveries were unreliable and inadequate so they all have not been counted. So information related to remaining 370 deliveries were analyzed. Out of 370 deliveries in past 3 years 139 Caesarean section were found and remaining 231 were normal deliveries. It represent very high (37.6%) CS rate in study area.

In study area 99 percent of the deliveries were Institutional, Out of all institutional deliveries majority (92.2%) occurred in private sectors and only 6 percent occurred in government hospitals, remaining occurred in PHC (0.5%), CHC (0.3%) and at home (1.1%). On comparing CS proportion as compared to normal delivery in institution, it was found that there were less number of CS in Government setup (20%) as compared to private (39.3%), which clearly indicates some economic interest of private hospitals for doing CS.

In study area most common indication of CS perceived by couple was Cephalo Pelvic Disproportion (34.5%), followed by malpresentation (15.1%), fetal distress during labour (7.2%) and money making by doctor (7.2%). Fewer couple also perceived Hypertension during pregnancy, big baby, big head, cord tied around neck, Oligohydramnios, post maturity, meconium aspiration as indications of CS. Fewer also perceived it as pressure from doctor (2.2%) to do CS. One of the couple want birth of male child on fixed day, so on couple's request CS has been done. 10 couples believed it to be as money making by doctor. So around 10 percent couples felt that they were cheated by doctors and doctors made money by doing CS, which indicates faulty practice of CS.

On inquiring the mothers if they were given choice for mode of delivery, it was observed that majority of mothers (98.4%) were not given a choice to decide mode of delivery, it is largely decided by the doctors or their family members.

On comparing caesarean history in relatives (mothers, sisters, aunts & first cousins maternal/paternal), it was found that less no. (29.2%) of CS found in relatives as compared to normal delivery (70.8%).

Study women were asked to give their preference for method of delivery in subsequent pregnancy independent to their past experience and it was found that majority of women (97.3 %) preferred vaginal delivery over CS for successive pregnancy.

On asking choice of delivery to women who experienced caesarean section in past, majority of them (93.5 %) gave preference for vaginal delivery. Very few (6.5%) gave preference for caesarean delivery.

On asking the reasons for caesarean preference for next delivery no pain during CS and more comfort in CS were mentioned as reason. On asking reasons for vaginal delivery preference major reasons were more comfort in normal delivery (27.4%), more morbidity in CS (24.2%), more cost in CS (22.5%). Some of them feared from CS and some of them believe that there was energy loss from our body in CS.

On comparing emergency and planned CS it was found that Majority of CS were done on emergency base (86.3%). On comparing trial of labour in both areas, it was found that trial of labour tried in 63.3 percent cases. While it was not tried in 36.7 percent of CS delivery, indicative of that proportion of planned CS in that area. In this study planned CS distribution were lower, but as trial of labour is indirect indicator of planned CS, which was clearly, reflected.

Discussion

In present study it was found that in urban area CS rate was 37.6 percent. WHO endorsed the principle that there is no region in the world where a population based CS rate exceeding 15% of all live births is justified.[1] CS is a common operation with the significant long term consequences for women of child bearing age. It is therefore important to obtain an accurate understanding at national level as to why this operation is being performed in such high and varying proportions in different areas / institutes. In NFHS 3 percentage distribution of deliveries by CS in the urban area was 16.8.[8] In present study it was found to be very high (more than 2 times than upper limit). The hazards (cost, morbidity etc) outweigh the benefits of CS once its rates increase beyond 15 percent. [1]

Even in subsequent pregnancy if they opt for CS they do not understand hazards of CS so we have to educate women about it. The CS rates of 37.6 percent in present study in urban population raises serious questions about the indications of CS in this population. Residents in urban areas in the entire country have accessibility and affordability which explain more than 3 times high CS rates. This urban rate of CS was also even higher than study done by S.Sreevidhya[5] et al at Chennai in 2003 where it was 32.6 percent, which was a population based study in middle class population in Chennai and also from Bhasin[9] et al, in New Delhi where it was 34.4 percent.

In present study institutional delivery rates were 98.9 percent and rest were home deliveries, which was consistent with study done by Bhasin[9] et al in New Delhi (99.3%), when compared between government and private sector in the present study, 20 percent deliveries were in government sector, which was less than found in study by Mony[10] et al (29.8%), however it was higher than rates in that study by Bhasin[9] et al (7.6%). One of the observations of Mony[10] et al study was less private deliveries (8.4%), which is very less when compared with the present study (92.2%). CS rates are high in private sector than those of public sector. Studies have also found that middle class and upper class women who mostly opt for private providers are more likely to have CS because they develop closer relationships with their doctors[11] indicative of possibility that this extremely useful surgical procedure is being misused for profit purposes in the private sector at several places, it should be ensured that the CS are done either in emergency or when there is a definite indication (CPD).

In study area majority of mothers were not given a choice for mode of delivery, it was largely decided by the doctors or their family members. On checking perception of women about choice of delivery, who delivered in last 3 years, it was found that majority of women in both areas (97.3 %) preferred vaginal delivery during

subsequent pregnancy. On asking reasons for preference to vaginal delivery they were, more comfort in normal delivery (27.4%); more morbidity in CS (24.2%) and more cost in CS (22.5%). Some of them feared operative procedures in CS and some of them believed that there may be loss of energy from our body during CS. On inquiring the reasons for CS preference for next delivery, no pain during CS and more comfort in CS than normal labour mentioned as reason for preferring CS. On asking choice of delivery amongst women having previous CS experience, majority of them (93.5 %) would have prefer for vaginal delivery over CS. This conveys an important message to be given to a request of women who opt for CS just to avoid the pain associated with normal vaginal delivery. It should be noted that previous CS is not an absolute indication for CS in subsequent pregnancy and in such cases a chance must be given to pregnant women to undergo normal labour.

In the study by Bhasin[9] at el among all of the CS, 54.9 percent were emergency while in 45.1 percent CS were planned, but in present study planned CS were found to be less (13.7%) than emergency CS (86.3%). In another study by Wilkinson Chris[12] et al done at Scotland planned CS rate was 38.9 percent, very high as compared to present study (13.7%). It was observed that for adequately screened women with a prior CS, in a hospital environment, a trial of labour is as safe as or even safer than planned CS. Successful trial of labour shortens the duration of hospital stay and gives more patient satisfaction. In study by Jongen[13] et al it was found that successful trial of labour were achieved in 62 percent of all deliveries, who needed CS. In present study a trial was attempted only in 63.3 percent cases where ultimately the CS was done.

Conclusions

1) CS rates observed in present study was very high. Further majority of CS in present study were conducted in private sector, which suggest some commercial interest may be at work as there is a large difference of expenditure involved in a CS and vaginal deliveries.
2) Very few women were actually given choice about mode of delivery and mostly it was decided by either doctor or family members.
3) When asked about preferred mode of delivery in subsequent pregnancy, most of the women preferred vaginal mode of delivery as compared to CS. This also included women who already undergone CS in past.
4) As there were very few planned CS in study area but sufficient trial of labour was not given in rest of "emergency CS", which could be prevented.

Recommendations

1) Safe reductions in the CS rates are possible, as hospital initiated programs can reduce CS use successfully by audit, review and action.
2) Obstetricians should abide by ethics in clinical practice and carefully evaluate the indication in every CS and should take an unbiased decision before performing CS on demand/request.
3) Public health education is the most important factors and the people should realize that rapidly rising CS rates may harm women and the next generations. Action should be taken to encourage vaginal births among couple by proper education.

4) While the treatment providers needs to be sensitized to avoid unjustified CS, community at a large also needs to be educated for the following:
   - CS is a major surgery associated with all short duration and lifelong complication, therefore the women should not pressurized the providers for the same.
   - A previous CS alone itself is not an indication for CS so a trial of labour should be done.

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Table 1: Distribution of CS according to type of institutional facility.

Institutional facility		
	No.	**CS**
Govt. facilities	25	5 (20)
Private	341	134 (39.3)
Total	**366**	**139 (37.9)**

Table 2: Perception of women regarding CS

	Response	Out of Total 370, No. (%)
Did women get choice of deliveries from doctor	**Yes**	6 (1.6)
	No	364 (98.4)
Women having history of CS in relatives	**Yes**	108 (29.2)
	No	262 (70.8)
Preferred choice of delivery in subsequent pregnancy by women	**Caesarean**	10 (2.7)
	vaginal	360 (97.3)
Preferred choice of delivery among women experienced Caesarean section. (N=139)	**Caesarean**	9 (6.5)
	vaginal	130 (93.5)

Table 3: Reasons for delivery preference

Reasons	No. (%)
1. for Caesarean	
More comfort in CS	5 (50)
No pain in CS	5 (50)
Total	**10 (100)**
2. for Vaginal	
Can't say	11 (3.1)
Feared from CS	1 (0.3)
If occurred normally then why need	18 (5)
Less time required for recovery in	1 (0.3)
More comfort in normal delivery	99 (27.4)
More cost in CS	81 (22.5)
More morbidity in CS	87 (24.2)
Stitch problem due to CS	7 (1.9)
More morbidity due to CS in future	54 (15)
More body energy loss in CS	1 (0.3)
Total	**360 (100)**

Table 4: Distribution of emergency and planned CS and trial of labour

Parameters	No. (%)
1. Types of	
Planned CS	19 (13.7)
Emergency CS	120 (86.3)
2. Trial of labour given	
Yes	88 (63.3)
No	51 (36.7)
Total	**139 (100)**