

# A STUDY OF 812 CAESAREAN SECTIONS WITH SPECIAL REFERENCE TO SOCIAL CUSTOMS AND CULTURAL TRADITIONS OF MANIPUR

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## Introduction

Manipur is a small State in the extreme north-eastern region of India with a total area of 22,356 sq. km. comprising 90 per cent hills and 10 per cent valley. It had a total population of 1.073 millions and literacy of 32.9 per cent (1971 Census) having per capita income of Rs. 475.1 in 1976-77 at 1970-71 prices (Economic Review, 1977-78). The local population belongs to a Tibeto-Mangoloid ethnic group, strictly observing special social customs and family traditions with a high cultural heritage. They still follow the joint family system and keep no servant or, helper for household works. All these factors are congenial to easy performance of labour and delivery.

Recently, there had been a change in the household duties and social habits of the women in the childbearing age of this State. Subsequently, an increase in the incidence of caesarean section had also been observed. Such a gradual rise had been reported by other workers from

other States (Chaubal *et al* 1978) of our Country. The factors of the increase incidence of caesarean section in this State as influenced by the changing social habits, domestic works and expanded health care programme are analysed here.

## Material and Methods

A prospective study of all the caesarean sections from 1972 to 1978 in this State and at Regional Medical College Hospital in 1979 was made. There were 812 caesarean sections, of which 176 were only at R.M.C. Hospital in 1979, and a total delivery of 19,342 during the same period. The indications, incidence maternal mortality, perinatal mortality and social customs have been analysed and studied for this purpose. To confirm our observations and to obtain more accurate information about the educational standard, occupation, socio-economic status, type of family, number of family members, amount of household manual works done per day, hour of rest during pregnancy and all the relevant factors, we started using a special proforma, for the last few years. All these factors have been observed to affect adversely, the delivery process of the women in this State.

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Accepted for publication on 21-4-80.

## Results

## Incidence

The yearly incidence of C.S. in this State from 1972 to 1978, and for 1979 at R.M.C. Hospital are shown in Table I. The average incidence for these years is 4.198 per cent, but upto 1978, we had at incidence of 3.6 per cent only, which was comparable with that of Chaubal *et al* (1978) and others. There had been a gradual rise in the incidence of caesarean sections in this State, inspite of its fast expanded medical and health care facilities. Undue increase in the number of unregistered and transferred cases (Vartak *et al* 1978) with increasing trend among educated women to avoid physical domestic works might also attribute to the rise of the incidence in this State. This was our experience at R.M.C. Hospital in 1979, with an incidence of 10.57 per cent which was definitely a high figure.

## Indications

The indications are summarised in Table II and it is seen that cephalopelvic disproportion (40.76%) antepartum haemorrhage (14.77 per cent) and abnormal presentation (transverse lie, 14.655 per cent) constitute the largest group in this series. In this series, the incidence for acute foetal distress was 6.65 per cent but repeat C.S. only 5.8 per cent showing no

TABLE II  
Indications

No. Sl.	Indication	No. of C.S.
1.	Cephalopelvic disproportion (C.P.D.)	331
2.	Transverse lie (with or without complications)	119
3.	A.P.H. (Placenta Praevia and accidental Hge.)	120
4.	Previous C.S. (Repeat C.S.)	47
5.	Acute foetal distress	54
6.	Obstructed labour	42
7.	Uterine rupture	27
8.	Cervical dystocia	19
9.	Cord prolapse	10
10.	Contracted pelvis	4
11.	Brow presentation	7
12.	Complicated breech	4
13.	Complicated twins	6
14.	Elderly primi with P.E.T. and eclampsia	6
15.	Constriction ring	2
16.	Uterine inertia with foetal distress	8
17.	Post maturity in elderly primi	2
18.	Leaking with failed induction	1
19.	Face presentation (mento-posterior)	1
20.	Compound presentation	1
21.	Persistent occipito posterior with uterine inertia	1
		812

Total number of deliveries: 19,342.  
C.S. Percentage: 4.198.

TABLE I  
Incidence of Caesarean Sections in All the Hospitals and Deliveries

Item	1972	1973	1974	1975	1976	1977	1978	*1979
Total Number of Deliveries	1429	1591	2474	2487	3220	3161	3315	1665
Total Number of C.S.	44(25)	62(27)	60(28)	89(28)	87(31)	118(53)	185(98)	176(76)
Percentage	3%	3.8%	2.4%	3.2%	2.7%	3.7%	5.5%	10.57%

\* Regional Medical College Hospital only.  
Figures within brackets indicates primi.



appreciable rise in the last 5 years. This confirmed the non-recurring nature of C.S. when the indication of the previous one was non-recurring (Sinha, 1977). In this series, more than 98 per cent were emergency admissions and they were brought to the hospital late in labour or, with failed trial of labour at their homes (Vashishtha *et al.*, 1976), occasionally with ruptured membranes (77.8 per cent). There were 42 cases of obstructed labour (5.2 per cent) in this series and this is a frequent obstetric problem in our country (Dutta *et al.*, 1978; Singh *et al.*, 1977). In spite of the expanded medical care and antenatal programmes (Table III), there were 27 cases of ruptured uterus. There were only 4 cases of contracted pelvis forming 0.495 per cent of all C.S.

facilities of the institutions in this State, as well as the unfavourable general condition of the patients. The local population possessed a very high degree of general resistance which should be further studied. Three losses were from gram negative septicaemic shock (endotoxic) and 1 from acute gastroenteritis.

#### Perinatal Mortality

Perinatal mortality was studied for 5 years period only (1974 to 1978). There were 33 perinatal loss including, 25 stillbirths when total number of C.S. was 530 and total delivery were 14657. This gave an incidence of 6.2 per cent. **Asphyxia**, prematurity and infection were the main causes of death. This is comparable to that of other authors.

TABLE III  
Public Medical Facilities in Manipur

Item	1972	1973	1974	1975	1976
1. Hospitals (including PHCs)	25	26	26	27	29
2. Dispensaries (including PHCs)	105	110	112	116	119
3. Beds available	832	911	911	916	955
4. Patients treated:					
(a) Indoor	11.5	17.0	17.0	15.1*	15.9*
(b) Outdoor	477.4	133.0	133.0	328.1*	313.4*
(c) Total	488.9	150.0	150.0	343.2*	329.3*
5. Persons employed:					
(a) Doctors	138	160	162	207	234
(b) Nurses, Midwives and Dais	346	310	326	377	382

Economic Review, 1977-78.

\*Excludes patients treated in the R.M.C., Manipur.

#### Maternal Mortality

There were 4 maternal deaths in this series, giving an incidence of 0.49 per cent. This was comparatively low considering the circumstances and available

#### Social Customs

This State preserved the old traditions and social habits prevailing over the last century. But the fast changing educational standard and economic status with modernisation in many spheres of life

have appreciably influenced the social pattern in many ways. This had already modified the obstetric profile of the State. Most of the customs and domestic traditions followed earlier by pregnant women were excellent antenatal exercises and natural physiotherapy. The modernised way of life among childbearing age group of women, abandoning household physical works, had apparently resulted in the rise of incidence of caesarean section in this State.

#### *Medical Facilities*

Medical facilities of the State (Economic Review 1977-78) are shown in Table III. This hardly covers the entire population of hills and uplands constituting 90 per cent of the total area, some of which is still inaccessible to the existing medical facilities. Most of the cephalopelvic disproportions and 119 C.S. might have been avoided with proper antenatal obstetric facilities, and 27 rupture uterus could also be avoided with proper obstetric care. These confirmed the possibilities for reduction in the incidence of C.S. in the State.

#### *Discussion*

The social set up, customs, family tradition and the way of life of the Manipuri Women, were conducive early engagement of the presenting part and easy delivery. These included grinding paddy, cooking, washing clothes, cleaning and sweeping the floor, and also washing the utensils as well as dishes, all in squatting position. Most of the women of reproductive age were engaged in heavy domestic works like, hand-pounding of paddy in standing position with a rhythmic forward and backward movements of the hip and also frequent cutting the firewoods. These were considered as graded

antenatal exercises during pregnancy, being more vigorous at term.

Till late 1940, C.S. was unknown in this State with a very low maternal mortality rate. In exceptional cases, destructive delivery was followed. Recently, we had seen hundreds of C.S. annually. Survey of these cases revealed many relevant facts for the increase in the incidence of C. S. These were socio-economic factors, changed social habits, educational status, profession, gradual avoidance of old traditions and modified dwelling houses with modernised way of life.

Women of high socio-economic group were found to have poor labour performance with more frequent abnormal delivery and C.S. This might be due to less involvement in physical or household works more consciousness of antenatal and natal processes, and intolerance of labour pain. They usually try to avoid the manual works and lead more sedentary life. Moreover, there was an appreciable improvement in the birth weight from an average of 2.5 to 3 to 3.1 kg. in the last decade, while the maternal statistics and pelvis remaining constant. The increase in birth weight could be attributed to the medical consciousness of this group of women leading to self medication and consumption of improved or supplementary diet during pregnancy with more physical rest. All these factors were contributory to increase incidence of C.S. in this State. We should also remember the institutional and obstetrician's factors of this increase.

Review of literature showed a gradual and steady rise in the incidence of C.S. (Chaubal, *et al*, 1978; Palanichamy, 1976; Dutta *et al*, 1978) throughout our country. Expanded medical facilities, improved diagnostic technique awareness of the complications and safety of the procedure,



with available trained hands could also be the major contributing factors in this stiff rise of caesarean sections in this State replacing the dangerous and more mutilating vaginal manoeuvres.

*Acknowledgement*

We are grateful to the Superintendents of Hospitals for allowing us to use the hospital statistics and to the Principal Regional Medical College, Imphal (Manipur), for kindly permitting us to publish this paper.

*References*

1. Chaubal, S. D., Thakur, V. R., Vinekar,

S. L. and Shah, S. H.: *J. Obstet. Gynec. India*, 28: 962, 1978.

2. Dutta, D. C. and Pal, S. K.: *J. Obstet. Gynec. India*, 28: 55, 1978.

3. *Economic Review, 1977-78*, Government of Manipur, Department of Statistics, P. 1, 24, 1978:

4. Palanichamy, P.: *J. Obstet. Gynec. India*, 26: 374, 1976.

5. Singh, V. K., Rohatgi, P. and Mukherjee, M.: *J. Obstet. Gynec. India*, 27: 198, 1977.

6. Sinha, R.: *J. Obstet. Gynec. India*, 27: 524, 1977.

7. Vartak, M. M. and Chatterjee, C. B.: *J. Obstet. Gynec. India*, 28: 811, 1978.

8. Vashistha, K., Legawaney, R. and Gupta, A. N.: *J. Obstet. Gynec. India*, 26: 386, 1976.