AN ALTERNATIVE DELIVERY POSITION (SQUATTING) PRACTICED IN RURAL AREAS

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SUMMARY

Primitive delivery position (squatting) is still practiced in the rural areas of Uttar Pradesh. A longitudinal study was conducted for a period of one year on 212 pregnant women in the age group of 15-45 years. During delivery in squatting position, its effects on the women and their new born was observed. It was observed that only 12% of the primigravida suffered 1st degree perineal tear. Most of the primigravida and 2nd gravida suffered labial tears. Women also felt more secure and close to midwife and relatives in squatting posture. This position of delivery did not effect the morbidity and mortality of the women and her new born. Therefore the traditional birth posture of squatting can be easily adapted for modern labour management. In rural areas a simple and in expensive technology like birth cushion can be advocated and for hospitals a delivery chair with modern techniques and material can be designed to suit the present day obstetrics.

INTRODUCTION :

The striking feature to emerge on reviewing primitive delivery position, is the dominant desire of the women to keep her trunk vertical during the second stage of labour. Women gave birth in a squatting, kneeling, standing or sitting position. Surprisingly in rural areas of western Uttar Pradesh delivery in squatting position is still practiced, proving that traditional practices are still deep rooted and practiced as they were practiced in several millenia B.C. (Egypt). This study was undertaken to findout wether squatting position was beneficial over the supine position practiced in our hospitals.

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MATERIAL AND METHODS :

Two hundred and twelve pregnant women were registered in the age group of 15-45 yrs in four randomly selected villages of western Uttar Pradesh. This longitudinal study was carried out for a period of one year from April 1987 to May 1988. Place, position and assistance was the choice of pregnant women. Home visits were made at the time of delivery. During delivery in squatting position, its effect on the parturient women and the new born was observed. Effect of squatting position on morbiditiy and mortality of the mother and the new born was also recorded

on a pretested cyclostyled proforma.

RESULTS :

In the study group when enquired by the woman by Questionnaire method as to why women prefered to be delivered in squatting position. Most of the women said "this position made them feel more secure and felt more close to the midwife and relatives especially the mother-in-law." Some of the women admitted that this position was more comfortable and reduces the backache. Women in the rural areas do not believe in exposing their private parts, which is true for the delivery in recumbent position practiced in our hospitals. More so, since this practice of squatting has been inculcated in them by their ancestors, the rural women have accepted it as part of their traditional practice good or bad. In the present study 89.6% of the deliveries were conducted at home in squatting position. Auxillary midwives conducted only 11(5.2%) deliveries Doctor conducted 9(4.2%) deliveries which were complicated and of these 4 were referred to the hospital before term. In remaining 5 the doctor was called at home after complications had already occured.

Relatives participated in 2(1%) of deliveries, when women delivered spontaneously. Rest of the deliveries were conducted by untrained Dai. Vertex presentation was seen in 96.2% deliveries and Breech in 2.35%. Twin pregnancy seen in 0.94% and Transverse lie in 0.47% of cases. 12% of the primigravidae suffered 1st degree perineal tear. Most of the primigravidae and second gravidae suffered labial tears. Complicated deliveries were only 38(18%) and consisted the following. Prolonged labour due to uterine inertia, cephalo pelvic disproportion and premature bearing down. Women getting exhausted before entering second stage of labour was observed in 19(50%) cases. Breech presentation was seen in 5(13.2%) cases, retained placenta in 3(7.9%) and foetal distress in 3(7.9%). Intrauterine death & post partum haemorrhage occurred in 2(5.3%) of the cases. Pre-clamptic toxemia (PET), cord prolapse lower segment caesarean section and jaundice and fever occurred 1(2.6%) case each. Neonatal mortality rate of 63.7/1000 live births was seen in the present study.

DISCUSSION :

In the present study women felt more secure while squatting and found this position most natural. Similar findings were enumerated by Haukeland (1981) while he was working in the obstetrics department in Kongsberg Hospital for development of the new delivery chair, which was tested on 300 deliveries with positive results.

It is only in the last 200 yrs. that a recumbent delivery position has become more usual in our part of the world. Even in the present times, we find societies in which women squat to give birth e.g. Brazilian Indian.

In the world, despite the unnecessary suffering and deaths caused by lack of appropriate care during pregnancy and child birth, only about 60% of the births are assisted by TBAs. Various authors abroad have reported the benificial effects of squatting position at various times, eg. while the women is squatting both transverse and antero-posterior diameters of the outlet are bigger, observed increases of 1 cm in the transverse and 2 cm in the anteroposterior posterior diameters are common and the average increase in the area of outlet, observe radiologically is 28% between the supine and squatting positions (Russell 1969 & 1982).

Kirchhoff (1977) found out that besides the mechanical reasons given, there is a better uterine tone, fetal blood supply and shorter duration of labour.

Haukeland (1981) reported favourably on his experience with a modern delivery stool. He said "it must be asked which is less traumatic, to separate a tight bony outlet with a foetal head pulled through with forceps or to use the natural forces of gravity, transmitted to the mother's pelvis through the abducted femora. A randomised controlled trial of squatting in the second stage of labour done by Gardosi (1989) on 427 primipara

revealed that squatting group has significantly fever forceps deliveries (9% vs 16%) and significantly shorter second stages. (median length of pushing 31 vs 45 mts) than the semirecumbent group. There were fever perineal tears but more labial tears in the squatting group. This finding is similar to the finding of the present study where only 12% of the primigravida suffered 1st degree perineal tear. While labial tears were more common. High neonatal mortality rate in the present study was mainly due to the unhygenic condition and ignorance on the part of untrained Dai, and was not related to the position of delivery. No incidence of birth injury and only two cases of birth asphxia were recorded. Only one maternal death occured because of secondary PPH and woman died on 3rd day of delivery, because of the lack of medical facilities in the village. One death in 200 women gives maternal mortality rate of 4.5/1000 live births which is comparable with the national figure of 4.5/1000 live births. No cases of oedema seen during the course of study and only one case of Post partum haemorrhage was recorded. Morbidity seen in women during the study was not related to the position of delivery. It was mainly due to the unhygenic conditions prevailing in the area studied.

In the present study women maintained squatting position throughout the second stage of labour which was also observed by Gardosi (1989) where women reported great satisfaction with supported squatting position. The traditional birth posture of squatting can be easily adapted for modern labour management and has advantages for women in their first labour.

CONCLUSIONS :

Suatting position is acceptable to women of rural area of U.P. They feel this position gives them a feeling of satisfaction and non-exposure of the private parts makes them feel more secure than in lying down position. Labial tears are more common in squatting position but they heal very fast compared to the perineal tears. There was no effect on the morbdity and mortality of the women and the new born due to the position of delivery. It is recommended to use simple and inexpensive technology in rural areas like birth cushion by which pushing becomes very easy and the second stage of labour is shortened. For hospitals with modern techniques and material to design, a delivery chair can be recommended which an satisfy the requirements of the present day obstetrics (Haukeland 1981).

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