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RESEARCH ARTICLE

PROVIDING CHOICE OF ALTERNATE BIRTHING POSITION IN SECOND STAGE OF LABOUR

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Abstract

Introduction:-

In modern obstetrics, the parturient rarely receives opportunities to deliver in a preferred position. A satisfying childbirth experience is influenced by woman's self-control, labour pain perception, expectations, and health care support.[1]We, the Obstetricians, restrict our attention only towards intra-partum maternal and foetal well-being and associated co-morbidities, thereby ignoring patient's comfort and their desire for a better birthing experience. Of all the available birthing positions, the recumbent one is offered because of its easier monitoring of foetal well-being, administration of intravenous therapy, loco-regional anaesthesia, and performance of medical procedures, perineal support, and birth assistance.Various alternate birthing positions are practiced off lately, of which the sitting position may benefit from "gravity effect", potentially reduce aorto-caval compression, to make uterine contractions effective, to favour a better foetal alignment in the birth canal and to increase pelvic outlet diameters, reducing intra-partum maternal and foetal complications.[2]Certainly, recumbent position makes it easier to palpate the mother's abdomen in order to monitor uterine contractions, to perform vaginal examinations and invasive manoeuvres, to check the foetal head position, and to assess the foetal heart rate.[3,4] Conversely, because of increased risk of maternal abdominal blood vessels compression, less effectiveness of uterine contractions, less perineal muscle relaxation, high rate of analgesia request and long labour length, recumbent position seems to be associated with more operative deliveries, severe pain and greater episiotomy rate.[5]

Aim:

Labour room Quality Improvement (QI) project aimed at providing choice of alternate birthing (sitting) position in second stage of labour.

Methodology:-

A short term Quality Improvement (QI) project was undertaken for a duration of 8 weeks at Pravara Rural Hospital, Loni, which is a 1275-bedded tertiary care teaching hospital located in central India, with approximately 10,000 deliveries conducted per annum at the Obstetric department.The resident doctors, nursing staff and faculty members actively participated in this QI project.A specially designed birthing chair was incorporated in Labour room.Necessary educational programmes were carried out and implemented for resident doctors and nursing staff, under the guidance of faculty members. Protocol was established for case selection and exclusion. Written informed consent was obtained from the pregnant woman prior to this study.Full term multiparous pregnancies (37–40 weeks gestation age) with previous history of vaginal delivery in a lying down position were included in the study. Mal-presentation, pregnancies with Previous uterine scar, Antepartum haemorrhage, Multi-foetal pregnancy, pregnancies

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associated with medical co-morbidities and high risk cases like Gestational diabetes, pre-eclampsia, moderate to severe anaemia, thrombocytopenia, IUGR and oligohydramnios were excluded from the study.Birthing chair data was collected on daily basis from resident doctors, and was compiled for a span of 8 weeks.Important data related to the study was collected from participants through personal interview and document review of indoor case file· Delivery details, delivery complications and baby details was collected from labour room delivery record and NICU record. The feedback about birthing experience on chair was collected by personal interview using feedback form prior to discharge.This feedback was considered in formulation of new policies or changing existing policies.

Results:-

During 8 weeks of the Quality Improvement (QI) project, 116 multi-gravid low risk women with average expected baby weight of less than 3000 grams, gave birth in sitting position on birthing chair with parturient's feet rested on ground. The average duration of second stage of labour was 18 minutes. The incidence of first and second degree perineal tear was 8 % and 2 % respectively. There was no case of post-partum haemorrhage or cervical tear. There was no need of shifting to supine position from siting position. The neonatal outcome was not adversely affected in the form of birth asphyxia ,foetal trauma or NICU admission. Active Management Of Third Stage of Labour (AMTSL) and immediate new born care including early breast feeding could be done in all cases. Women expressed great satisfaction and comfort in siting position as compared to their experience of previous delivery in supine position.

Discussion:-

Several advantages have been claimed for non-recumbent labour, thanks to "gravity effect" on uterine perfusion, on contractions effectiveness, and on foetal alignment to the pelvic angles and diameters.[1]In the first stage of labour, vertical positions seem associated with lower pain, reduced labour length, and perception of physiological event, resulting in an increased women's comfort and satisfaction after childbirth.[3,4] These evidences have been confirmed in a recent meta-analysis revealing that vertical positions are also associated with a lower analgesia request and necessity of interventions. Episiotomy, operative vaginal delivery, and severe vaginal ears rate confirmed in our series of cases previous evidences regarding the positive effect of alternative position.[6,7,8,9]This finding can be related to better and gradual maternal perineum compliance to the foetal head descent, reducing anatomical and functional perineal damage and consequent dysynergia.Several studies reported that when a spontaneous analgesic and comfortable position is allowed, labouring women may benefit from a shorter labour length, avoidance of augmentation, and lower pain, reaching childbirth with strong motivation.[10,11,12,13]

After the delivery on birthing chair, most of the women had no complications like PPH, perineal tears and cervical tear. As need for surgical intervention was less, post deliveryhospital stay was reduced and women were very happy to be discharged early with a healthy baby.

Conclusion:-

This short term Quality Improvement (QI) project helped in providing alternate birthing position to women in second stage of labour and providing respectful maternity care. Women were satisfied with this alternate birthing sitting position and it was a new experience for all doctors and nurses.

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