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Original Research Article

## A comparative study of partogram in normal labour with and without a constant caring companion

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### ABSTRACT

**Background:** In today's world with the concept of changing childbirth, where there is a 'women centered approach', the idea of a constant caring companion has reemerged. In a busy labour ward patients may deliver safely but it may contribute to patient's dissatisfaction, as they do not feel cared for. The constant caring companion would prove an important asset to the doctor and nurses involved in the management of the women in labour.

**Methods:** Prospective study carried out in 120 patients meeting inclusion criteria.

**Results:** Patients with constant caring companion had significant lower percentage (13.3%) of pain level as compared to those without companion. The mean satisfaction score of the patients with ccc was 90.66 whereas the score of the group without ccc was 30.33 which statistically highly significant. 42 of the patients with ccc and 39 patients without ccc opted for known female relative as constant caring companion. All woman in the study group and 97% in the control group would recommend a constant caring companion to the pregnant woman.

**Conclusions:** Women with a constant caring companion have a more fulfilling and satisfactory experience of the labour process which cannot be said about the women without ccc. Since no negative impact was observed due to the presence of a constant caring companion, this practice may be recommended. The constant caring companion would prove an important asset to the doctor involved in the management of labouring women.

**Keywords:** CCC- constant caring companion

### INTRODUCTION

Conception of life and carrying it through the entire course of its existence, ending finally in the birth of a new creation is courageous indeed! It is an enduring task which is fraught with emotional upheavals, discomfort, pain, modification of lifestyle and attitude change. Yet, the fruits of the long journey through the nine months more than compensate for the job.

Labour and birth are an amazing integration of powerful physiological and psychological forces that brings a new human life into the world. There comes a destined time for the baby to come into the world and lead an independent existence. This is time of 'labour'. Truly the

woman has to undergo 'labour pains' to deliver the baby. This labour of long duration has to be borne by the women. Apart from the medical help, she requires a constant companionship from a reliable, compassionate, affectionate and caring person who would guide her throughout the labour process. This concept of a caring companion is an old one with its origin lost in time and has re-emerged in modern times. In today's world with the concept of changing childbirth being introduced, where there is a 'women centered approach', the idea of a constant caring companion has reemerged with re-kindled interest.<sup>1,2</sup> An ideal constant caring companion would be someone who is known to the labouring women, in whom she can confide, trust and develop a good rapport. We undertook the study using a female relative who was

counselled and trained, would remain with the women throughout the labour and delivery process yet would not be directly involved in the obstetrical management. She would talk to the labouring women, comfort her during labour pain, reassure and clear her doubts. She would also allay her fears, attend to her immediate needs and give a good emotional support to her. During active labour she would help her with relaxation techniques and be a moral support during the 2<sup>nd</sup> stage of labour. She would remain with the patient for two hours after delivery.

Medicalisation of childbirth has its advantages but many a times the personal touch is lost. In a busy labour ward patients may deliver safely but it may contribute to patient's dissatisfaction, as they do not feel cared for. The constant caring companion would prove an important asset to the doctor and nurses involved in the management of the women in labour.

## METHODS

This prospective study was carried out in 120 patients in the Department of Obstetrics and Gynaecology in a tertiary referral rural hospital. This study was carried out in primigravidae with a term pregnancy (gestational age >37 weeks) and who were in active labour. Active labour was defined as the dilatation of the cervix >3 cm with uterine contraction 1-2 every 2-3 minutes lasting for minimum 30 seconds. Prior to enrolment proper counseling of patient was done and consent was taken.

The counseling involved describing the study pattern in the patients' own language, explaining the contribution expected from the patient. Thorough assessment of the patient was undertaken as mentioned below. A constant caring companion (C.C.C.) is allotted to the patient randomly. The constant caring companion is a known female relative of patient who has been counseled and trained regarding the role she has to play and is with her throughout labour, delivery and up to two hours postpartum.

She talks to the patient, explains the stages of labour and time frames, importance of ambulation, type of food and beverages to be taken during labour. She also educates the patient about breathing and relaxation exercises, the position adopted during labour. Patient was assessed with following proforma. The patients were interviewed through a questionnaire within 24 hours. The questions were regarding her experiences during labour and delivery, pain level and her opinion about the constant caring companion.

Patient was also asked whether she would opt for another pregnancy, keeping in mind her experiences this time. She was also asked if she would like to have a constant caring companion, for the next time. If so who would be her ideal choice. Significance concerning data was tested by the use of chi square test, z-test, Fisher's Exact test.

The level of testing significance was set at  $p=0.05$ . The satisfaction scoring was evaluated by using a modified Mackey Questionnaire.<sup>3</sup>

## RESULTS

The study group had significant lower percentage of pain level as compared to the control group. None of the patient of study group experienced very severe pain as compared to 13.33% patients of the control group. 6.66% patients of the study group experienced severe level of pain as compared to 40% patients of the control group. 33.33% patients of the study group experienced moderate pain as compared to 40% patients of the control group. 56.66% patients of the study group experienced mild pain as compared to only 6.66% patients of the control group did so. Moreover, 3.33% of study group have no pain. Whereas none of the control group experienced so.

**Table 1: Analysis of percentage of pain level in the study and control groups.**

Group	Very Severe	Severe	Moderate	Mild	No Pain
No.	%	No.	%	No.	%
Study Group	0	0	4	6.66	20
Control Group	8	13.33	24	40	24

$\chi^2$  value 48.33,  $p$ -value < 0.0001, S

**Table 2: Mean pain level in the study and control group.**

Group	No. of patients	Mean % of pain level	Std. deviation	Z-value
Study Group	60	35.00%	16.07	8.86 $p$ -value=0.00
Control Group	60	65.00%	20.68	S $P$ <0.05

The pain level obtained by labouring women was significantly lower in the study group (35.00%) than the control group (65.00%).

**Table 3: Mean satisfaction score in study and control groups.**

Group	No.	Mean	Std deviation	z-value
Study Group	60	90.66	13.00	22.62 $p$ -value=0.00 S
Control Group	60	30.33	16.04	$P$ <0.05

The mean satisfaction score of the study group was 90.66 whereas the score of the control group was 30.33 which statistically highly significant ( $p$ <0.05).

**Table 4: Partographic analysis of progress of labour in the study and control group.**

Group	Within alert line	Outside alert line	Outside action line	N <sup>2</sup> -value
Study Group	48	8	4	1.77 p-value=0.41 NS, p>0.05
Control Group	50	4	6	

Table 4 shows the partographic analysis of the progress of labour in the two groups. 48 patients in the study group and 50 patients in the control group delivered within the alert line. 8 patients in the study group and 4 patients in the control group delivered outside the alert line, while 4 patients in the study group and 6 patients in the control group delivered outside the action line. Out of the 4 patients in the study group who delivered outside the action line, 2 delivered by outlet forcep application (Indication: In both patients' outlet forcep was, applied because of prolonged second stage of labour) while the other 2 required an LSCS (Indication: In both LSCS was, prolonged second stage of labour with fetal distress). Out of the 6 patients in the control group who delivered outside the action line, 4 required an emergency LSCS (Indication: In one each patient was nonprogress of labour and DTA and in two patients was fetal distress with thick meconium,). 2 delivered after augmentation of labour with oxytocin, appropriately titrated and religiously monitored at frequent intervals. The difference in the duration of labour, in both the groups were not statistically significant.

Table 5 shows the opinion of the patients in both the groups regarding their choice of constant caring companion in future. Only 6 patients in the study group and 8 patients in the control group thought that the husband was an ideal choice. 42 of the patients in the study group and 39 in the control group opted for known female relative, whereas 12 patients in the study group and 13 patients in the control group said that they would be comfortable with any female person. Maximum patients opted for female person as constant caring companion.

**Table 5: Ideal choice of constant caring companion in the study and control group.**

Choice of CCC	Study group	Control group	N <sup>2</sup> -value
Husband	6 (10%)	8 (13.33%)	0.43 p-value = 0.80 S P<0.05
Known female relative	42 (70%)	39 (65%)	
Any female person	12 (20%)	13 (21.66%)	
Total	60	60	

**Table 6: Opinion about recommending a constant caring companion.**

Group	Yes		Yes	
	No.	%	No.	%
Study Group	60	100	0	0
Control Group	58	97	2	3

This table shows the number of patients who would recommend a constant caring companion to another pregnant woman, in the future. All woman in the study group and 97% in the control group would recommend a constant caring companion to the pregnant woman.

**Table No 7: Analysis of overall satisfaction score in study and control group.**

Group	Overall Satisfaction Score(n=60)	
	100% Score	75% Score
Study Group	60 (100%)	0 (0%)
Control Group	55 (91.66%)	5 ( 8.33%)

In study group all 60 patients and in control group 55 patients having 100% satisfaction score and none in study group and 5 patients in control group having 75% satisfaction score.

## DISCUSSION

Findings of our study could be correlated with study done by Kennell et al involving 413 women, support group of 212 and observed group of 212 which showed no effect on duration of labour in contrast to Meta-analysis of four studies conducted by Zhang et al who stated support during labour shortens the duration.<sup>4,5</sup> Conflicting results have been found with various studies, majority quoting that the presence of constant caring companion reduces the duration of labour. Our observation that mean pain level obtained by labouring women with ccc was significantly less than in women without ccc which was similar to study conducted by Susan k et all who randomly selected 39 women with ccc and 45 women without ccc but receiving epidural analgesia, results of both the group in her study revealed equivalent level of pain experience proving the effect of ccc equivalent to epidural analgesia.<sup>6</sup> In present study satisfaction score amongst women who delivered with ccc was higher significantly compared to those without. Similar results were seen in study by Mackey et al who stated low labour pain had higher total childbirth satisfaction.<sup>7</sup> caregivers have the potential to make a significant difference to a woman's childbirth experience. Satisfaction was affected by multiple factors, amongst which was the presence of constant caring companion. Present study showed no difference in operative intervention in labouring women with or without constant caring companion which was contrary to research review of Cochrane library done by Hodnett et al.<sup>8</sup>

## CONCLUSION

Women with a constant caring companion have a more fulfilling and satisfactory experience of the labour process which cannot be said about the women in the control group. But since no negative impact was observed due to the presence of a constant caring companion, this practice may be recommended. The constant caring companion would prove an important asset to the doctor and nurse involved in the management of women in labour. On the basis of our findings we recommend that every woman in labour should have a constant caring companion.

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