

Companionship during Labour: Attitudes and Expectations of Hong Kong Chinese

Wan-Kam CHIU MBChB

Department of Obstetrics and Gynaecology, United Christian Hospital, Kwun Tong, Hong Kong

Wai-Hang CHUNG MBChB, MRCOG

Department of Obstetrics and Gynaecology, United Christian Hospital, Kwun Tong, Hong Kong

Lin-Wai CHAN MBChB, FRCOG

Department of Obstetrics and Gynaecology, United Christian Hospital, Kwun Tong, Hong Kong

William WK TO MBBS, MPhil, MD, FRCOG

Department of Obstetrics and Gynaecology, United Christian Hospital, Kwun Tong, Hong Kong

Objectives: To assess the attitudes and expectations of Hong Kong women and their partners toward companionship during labour.

Methods: A prospective questionnaire survey was conducted from February to July 2013 in a regional obstetric unit. A total of 450 Hong Kong Chinese women carrying a singleton pregnancy in cephalic presentation at term, and their partners were enrolled. Questionnaires were distributed to the women and their partners when they attended the out-patient clinic or when they were admitted to the antenatal ward.

Results: A total of 315 women and 197 partners completed the self-administered questionnaires, of whom 96% of women and 93% of partners considered emotional support as the major element of companionship during labour. There were significantly more partners than women who considered taking photographs / videos to be one of the elements of companionship during labour. Around 78% of women wished for companionship, while 83% of partners planned to accompany the labour. Among the women who planned for companionship, they were significantly more educated, and a higher proportion were either born in Hong Kong or had been resident for more than 7 years compared with those who did not.

Conclusion: Companionship during labour was highly acceptable among women and partners.
Hong Kong J Gynaecol Obstet Midwifery 2015; 15(2):124-30

Keywords: Attitude; Friends; Labor, obstetric; Parturition; Social support

Introduction

Childbirth is a stressful physical and psychological experience in a woman's life, requiring optimal coping strategies. According to a Cochrane review¹, women who received continuous psychological support from companionship during labour were more likely to give birth naturally. These women were less likely to use analgesics, more likely to be satisfied with their labour experience, and had slightly shorter duration of labour. Their babies were less likely to have a low 5-minute Apgar score. As no adverse effects were identified from such companionship, continuous support during labour was recommended for all women.

In actual clinical practice, there are a wide range of cultural and societal differences in childbirth support systems. In developed countries, the main social supporters are usually the partners or close relatives^{2,3}. In contrast, in many developing countries like South America and Africa, companionship during labour (CDL) is not routine^{4,5}. In

Hong Kong, CDL has been advocated for several decades⁶.

This study aimed to assess the attitudes and expectations of Hong Kong Chinese women and their partners regarding CDL.

Methods

Participants

The present study was conducted at the United Christian Hospital, Hong Kong, from February to July 2013. Hong Kong Chinese women carrying a singleton pregnancy in cephalic presentation at 37 weeks or more were recruited either from the antenatal clinic or ward. Both the women and their partners were invited to complete a self-administered questionnaire written in Chinese. Subjects

Correspondence to: Dr Wan-Kam Chiu

Email: chiujessie@hotmail.com

who were recruited in the clinic were recorded to avoid duplication of questionnaire distribution when they were subsequently admitted to the ward. Women with a fetus in non-cephalic presentation, with multiple gestations, and those scheduled for elective Caesarean section or of non-Chinese ethnic origin were excluded from recruitment.

Questionnaire

The assessment was carried out by a self-administered questionnaire. There were two sets of slightly different questionnaires distributed for the women and their partners. They were advised to complete the questionnaires separately without any discussion among themselves. Each of them was asked specific questions about their opinion of CDL. Information about the expectations of CDL, views on suitability of CDL in different clinical situations, desire for CDL, and the reasons were collected. In addition, their views on the need for antenatal childbirth education classes and their feelings about the attitudes of staff towards CDL were explored. Finally, demographic data were collected and correlated with the data obtained from the questionnaires.

Ethical Consideration

The study was approved by the hospital research ethics committee prior to recruitment of participants. Written informed consent was obtained.

Sample Size

Assuming the population from which samples were drawn was 900 for 3 months, with an expected prevalence of preference for CDL at around 50%, and allowing a 95% confidence level, the sample size for this study would be 269.

Data Analysis

Statistical analysis was performed with the Statistical Package for the Social Sciences Windows version 15.0 (SPSS Inc., Chicago [IL], US). Means and standard deviations were calculated for continuous variables, while Student's *t* test was used to assess means between groups. Chi-square test or Fisher's exact test were used for proportions. Significance was established at *p* values of <0.05.

Results

A total of 450 eligible women and their partners were invited to participate in this study: 315 women and 197 partners returned their questionnaire during the 6-month period with an overall response rate of 70% and 44%, respectively.

A great majority (99% of women and 98% of their partners) were aware of the meaning of CDL. With reference to their precise understanding of the meaning, women and their partners largely shared the same view. Within this cohort, 96% of women and 93% of partners considered emotional support as the major element of CDL ($p=0.15$). Other elements of CDL included making decisions together (52% of women vs. 48% of partners; $p=0.40$), physical support (31% of women vs. 35% of partners; $p=0.42$), and cutting the umbilical cord (21% of women vs. 21% of partners; $p=0.86$). There were significantly more partners than women who considered taking photographs / videos as one of the elements of CDL (1% of women vs. 20% of partners, $p<0.001$).

With regard to the expectations of the effects of CDL, the majority of women and their partners expected CDL to have positive effects on the progress of labour, to reduce labour pain, increase chance of spontaneous vaginal delivery, increase labour satisfaction, and decrease postnatal depression. Paradoxically, more women than partners believed CDL could reduce blood loss during delivery (23.6% vs. 14.2%, $p=0.03$) while more partners believed CDL would reduce episiotomy rates (19.3% vs. 12.1%, $p=0.04$). In contrast, most women and their partners considered CDL had no major effects on use of oxytocin, as well as the health of newborn or breastfeeding rates (Table 1).

When understanding suitability of CDL, while 98% of both women and partners agreed that CDL was appropriate for spontaneous vaginal delivery, around half suggested that it could also be continued when assisted vaginal delivery or emergency Caesarean section was required (Table 2).

Regarding the nature of the supporters during labour, most women recommended their partner (97%). Other suitable persons included mother (30%), sisters (13%), and friends (4%). If women were allowed to choose only one individual to accompany them, 95% would choose their partners, 4% their mothers, and less than 1% their sisters or friends.

Around 78% of women wished for CDL while 83% of their partners planned to accompany the labour. The top three supporting reasons were to provide support to the women, provide emotional security to the women, and witness the birth of the newborn. Of those women who did not prefer CDL, the top three reservations were distraction due to CDL, embarrassment, and their partners being busy

Table 1. Expectations of effects of companionship during labour*

	Women (n=313 [†])			Partners (n=197)			p Value
	Positive effects	Negative effects	No effects	Positive effects	Negative effects	No effects	
Progress of labour	170 (54.3)	2 (0.6)	141 (45.0)	117 (59.4)	3 (1.5)	77 (39.1)	0.28
Reduce pain	186 (59.4)	3 (1.0)	124 (39.6)	118 (59.9)	1 (0.5)	78 (39.6)	0.85
Reduce blood loss	74 (23.6)	1 (0.3)	238 (76.0)	28 (14.2)	1 (0.5)	168 (85.3)	0.03
Reduce use of oxytocin	91 (29.1)	0	222 (70.9)	70 (35.5)	0	127 (64.5)	0.13
Less episiotomy	38 (12.1)	0	275 (87.9)	38 (19.3)	0	159 (80.7)	0.04
Increase chance of spontaneous vaginal delivery	200 (63.9)	1 (0.3)	112 (35.8)	135 (68.5)	0	62 (31.5)	0.43
Improve health of newborn	108 (34.5)	2 (0.6)	203 (64.9)	74 (37.6)	1 (0.5)	122 (61.9)	0.77
Increase satisfaction	234 (74.8)	0	79 (25.2)	142 (72.1)	0	55 (27.9)	0.50
Decrease postnatal depression	236 (75.4)	3 (1.0)	74 (23.6)	150 (76.1)	0	47 (23.9)	0.39
Increase breastfeeding rate	54 (17.3)	1 (0.3)	258 (82.4)	36 (18.3)	0	161 (81.7)	0.70

* Data are shown as No. (%) of subjects

† 2 Subjects did not complete this part of questions

Table 2. Attitudes on suitability of companionship during labour*

	Women (n=312 [†])		Partners (n=197)		p Value
	Suitable	Not suitable	Suitable	Not suitable	
Spontaneous vaginal delivery	305 (97.8)	7 (2.2)	193 (98.0)	4 (2.0)	0.86
Assisted delivery	174 (55.8)	138 (44.2)	102 (51.8)	95 (48.2)	0.38
Elective Caesarean section	153 (49.0)	159 (51.0)	84 (42.6)	113 (57.4)	0.16
Emergency Caesarean section	89 (28.5)	223 (71.5)	49 (24.9)	148 (75.1)	0.37
First stage	258 (82.7)	54 (17.3)	148 (75.1)	49 (24.9)	0.06
Second stage	265 (84.9)	47 (15.1)	160 (81.2)	37 (18.8)	0.27
Third stage	243 (77.9)	69 (22.1)	148 (75.1)	49 (24.9)	0.47

* Data are shown as No. (%) of subjects

† 3 Subjects did not complete this part of questions

at work. For the partners, the top three reservations were distraction, being afraid of blood, and witnessing the pain of the woman in labour (Table 3).

Those who opted for CDL were significantly more likely to have received tertiary education, be born in Hong Kong, and have stayed in Hong Kong for more than 7 years, compared with those who opted not to have CDL (Table 4). Similarly, there were also significantly more partners who had stayed in Hong Kong for more than 7 years among those opting for CDL. There were no differences between the two groups in age, marital status, occupational categories, or household income.

About half of the women and their partners considered antenatal childbirth education classes essential. Women and their partners were also asked to rate their feeling about attitudes of staff in supporting CDL on a visual analogue scale from 0 to 10. The score given by women who opted for CDL was significantly higher than that given by those refused (7.9 vs. 7.0, p=0.01). There was a similar but non-significant trend among partners (7.6 vs. 7.0, p=0.09).

Discussion

Based on the data from this survey, there was a high overall understanding by pregnant women and their

Table 3. Acceptability of companionship during childbirth*

Noted benefit(s) of companionship	Data [†]	
	Women (n=246)	Partners (n=164)
CDL has positive effect on delivery	94 (38.2)	62 (37.8)
CDL is the responsibility of partner	29 (11.8)	48 (29.2)
Support the mother	150 (61.0)	127 (77.4)
Reduce stress	87 (35.4)	63 (38.4)
Provide emotional security to mother	149 (60.6)	77 (47.0)
Witness the birth of newborn	138 (56.1)	68 (41.5)
Increase the intimacy with partner	55 (22.3)	31 (18.9)
Increase bonding with the newborn	35 (14.2)	11 (6.7)
A good experience to witness the process	1 (0.4)	1 (0.6)
Improve medical knowledge	NA	4 (2.4)
Reservation(s) against companionship	Women (n=28)	Partners (n=15)
No partner	0	NA
Not in Hong Kong	3 (10.7)	1 (6.6)
Busy at work	9 (32.1)	1 (6.6)
Embarrassment	14 (50.0)	2 (13.3)
Affect sexuality	7 (25.0)	NA
Partner refused CDL	7 (25.0)	NA
Distract mothers	17 (60.7)	7 (46.7)
Fear of blood	NA	7 (46.7)
Annoyed by crying of newborn	NA	1 (6.6)
Fear of crying of the labouring mother	NA	3 (20.0)
Long labour time predicted	NA	1 (6.6)

Abbreviations: CDL = companionship during labour; NA = not available

* Data are shown as No. (%) of subjects

[†] Women and their partners were requested to list the noted benefit(s) of companionship if they planned for CDL; the reservation(s) against companionship if they planned not for CDL; and to list both if they were indecisive. Some women and their partners did not fill in this part of questions

partners of CDL. Nearly all subjects were aware of its existence. Companionship during labour was apparently also highly acceptable among women and partners.

According to the recently updated Cochrane review in July 2013¹, common elements of CDL include emotional support, information about labour progress and advice regarding coping techniques, comfort measures, and advocacy. Similarly, the majority of our subjects considered emotional support to be the major element although only one-third considered physical support to be a role of the companion. This might be explained by the fact that they were not aware of the importance and methods of providing this kind of support, particularly concerning pain control. This could be improved by attending antenatal childbirth

education classes, and also dual participation in a birth ball programme that has been considered an alternative means of relieving labour pain and decreasing pethidine consumption^{7,8}. Its use may nonetheless require some adaptations to current midwifery practice in Hong Kong wherein patient mobility is usually limited by the common use of continuous electronic fetal heart monitoring.

Interestingly, around one-fifth of the women and their partners considered cutting the umbilical cord an important element of CDL, and significantly more partners considered taking photographs or videos as one of the elements of CDL. This practice might be fuelled by media coverage of celebrity couples who share their birth experience, emphasising the ritual cutting of the

Table 4. Baseline demographics of women and their partners*

Demographics	Women [†]			Partners [†]		
	Planned CDL (n=244)	Planned no CDL / indecisive (n=53)	p Value	Planned CDL (n=158)	Planned no CDL / indecisive (n=30)	p Value
Age (years)			0.47			0.99
≤25	34 ± 14	9 ± 17		10 ± 6.3	2 ± 6.7	
26-30	86 ± 35.2	14 ± 26.4		39 ± 24.7	8 ± 26.7	
31-34	71 ± 29	20 ± 37.8		52 ± 32.9	9 ± 30	
≥35	53 ± 21.8	10 ± 18.8		57 ± 36.1	11 ± 36.6	
Marital status			0.63			
Married	229 (93.9)	52 (98.1)		–	–	
Never married	10 (4.1)	1 (1.9)				
Divorced / separated	1 (0.4)	0				
Cohabitation	4 (1.6)	0				
Education level			0.02			0.59
Primary	4 (1.6)	3 (5.7)		3 (1.9)	1 (3.3)	
Secondary	163 (66.8)	42 (79.2)		93 (58.9)	20 (66.7)	
Tertiary	77 (31.6)	8 (15.1)		62 (39.2)	9 (30)	
Place of birth			0.003			0.54
Hong Kong	129 (52.9)	16 (30.2)		99 (62.7)	17 (56.7)	
Mainland China	115 (47.1)	37 (69.8)		59 (37.3)	13 (43.3)	
Residency			<0.001			0.05
>7 Years	197 (80.7)	30 (56.6)		134 (84.8)	21 (70.0)	
<7 Years / visiting visa	47 (19.3)	23 (43.4)		24 (15.2)	9 (30.0)	
Occupation			0.11			0.17
Housewife	108 (44.3)	33 (62.3)		0	0	
Clerical work	78 (32.0)	11 (20.8)		45 (28.5)	6 (20.0)	
Workman	2 (0.8)	0		26 (16.4)	10 (33.3)	
Professional	26 (10.7)	2 (3.8)		51 (32.3)	7 (23.3)	
Others	30 (12.3)	7 (13.2)		36 (22.8)	7 (23.3)	
Household income (HK\$)			0.13			
<10,000	48 (19.7)	16 (30.2)		–	–	
10,001-20,000	102 (41.8)	25 (47.2)				
20,001-50,000	87 (35.7)	11 (20.8)				
>50,000	7 (2.9)	1 (1.9)				

Abbreviation: CDL = companionship during labour

* Data are shown as mean ± standard deviation or No. (%)

† Some women and their partners did not fill in this part of questions

umbilical cord by the partner as well as recording the birth process. Although videotaping is commonly not allowed in public hospitals, some public hospitals do allow cord cutting and offer facilities such as birth balls and labour massage. They may change the perception or expectation of the role of partners in accompanying labour. Whether

this should be further encouraged or explored is debatable as these may distract from the care of both the parturient and the newborns. Women may also be concerned about videotaping as only 1% of them accepted taking photos and videos as a component of CDL. For the women surveyed, the focus was on safety of the labour process:

documentation of the birth process was less important to them.

According to the postulated concept of the fear-tension-pain cycle by Dick-Read⁹, excessive anxiety increases endogenous release of catecholamines that reduces blood flow to and from the placenta, restricts fetal oxygen supply, reduces effectiveness of uterine contractions, and slows labour progress¹⁰. It has therefore been proposed that CDL can reverse this cycle. In our study, about half expected CDL to exert positive effects on the progress of labour, and about 60% to 70% expected this to increase the chance of spontaneous vaginal delivery. These findings have been similarly reported^{1,11}. In a Cochrane review¹, supported women required less pain medications and were more likely to be satisfied with the experience of labour. There was no apparent impact on other intrapartum interventions, maternal or neonatal complications or breastfeeding.

There was no consensus on situations where CDL was unsuitable. In general, CDL was considered suitable for spontaneous vaginal delivery in most countries. In our study, most women and partners considered CDL suitable for spontaneous vaginal delivery although only around half considered CDL suitable during assisted vaginal delivery and only one-fourth during emergency Caesarean section. This demonstrated a concern for interference with patient care in emergency situations.

Compatible with the findings of many high-income countries, the main preferred supporter was their partner¹²: 95% of women in our study would choose their partners if they were allowed to choose only one individual for CDL.

Attendance at antenatal childbirth education classes has been shown to affect a father's ability to offer assistance¹³. Fathers who attended class were more likely to provide physical comfort to the women. Donovan¹⁴ also showed that fathers were often unclear of their role as they lacked the information and support to meet the women's expectations. In our study, only about half of the respondents believed childbirth education classes were essential for CDL. This might be improved by scheduling antenatal classes at weekends when more working women and partners can attend together. Alternatively, provision of such classes on the internet with interactive sessions may further enhance fathers' participation and exposure.

Significantly more women who received higher education considered CDL. This might be because of the increased awareness of its existence and value. Another explanation could be that they are more cognizant of their rights, and think companions can improve communication with health care professionals in stressful situations such as labour. Although it is not unexpected that those more educated women opted for CDL, enhanced efforts should also be made to propagate the role and value of CDL to those who are less well educated.

Among the subjects recruited in this survey, most women who were not born in Hong Kong were immigrants from mainland China. Their lower preference for CDL might be due to cultural differences and a general lack of provision of CDL in mainland hospitals, so that they are not aware of the importance of CDL. The Better Births Initiative promotes labour companionship as a core element of care for improving maternal and infant health, in several low- and middle-income countries, including China¹⁵. It is desired that more and more women should be aware of CDL, and also agree to have CDL.

Our study had several limitations. First, the response rate of partners was relatively low. This was related to the fact that many women attended antenatal follow-up alone, and their partners were often excluded from the antenatal ward shortly after admission due to the visiting policy. Thus partners were often unavailable, or found it inconvenient to return their completed questionnaire. Another less likely explanation would be that those who did not return the questionnaire might have reservations towards CDL and not complete the questionnaires. We believe that the non-responses were more related to random non-availability of the partners: a general comparison of the epidemiological characters (age, occupation or education level) of responding and non-responding partners revealed no significant differences. Secondly, this study focused on only Chinese women: Hong Kong is an international city with multi-ethnicity and further studies should be inclusive of women and their partners from other ethnicities.

Conclusion

The CDL was highly acceptable to women and their partners. Partners should be adequately prepared so that they are able to provide effective physical and psychological support to meet the women's needs.

References

1. Hodnett ED, Gates S, Hofmeyr GJ, Sakala C, Weston J. Continuous support for women during childbirth. *Cochrane Database Syst Rev* 2011; (2):CD003766.
2. Bondas-Salonen T. How women experience the presence of their partners at the birth of their babies. *Qual Health Res* 1998; 8:784-800.
3. Madi BC, Sandall J, Bennett R, MacLeod C. Effects of female relative support in labor: a randomized controlled trial. *Birth* 1999; 26:4-8.
4. Oboro VO, Oyeniran AO, Akinola SE, Isawumi AI. Attitudes of Nigerian women toward the presence of their husband or partner as a support person during labor. *Int J Gynaecol Obstet* 2011; 112:56-8.
5. Maimbolwa MC, Sikazwe N, Yamba B, Diwan V, Ransjö-Arvidson AB. Views on involving a social support person during labor in Zambian maternities. *J Midwifery Womens Health* 2001; 46:226-34.
6. Ip WY. Relationships between partner's support during labour and maternal outcomes. *J Clin Nurs* 2000; 9:265-72.
7. Chang CY, Gau ML. Experiences applying a birth ball to help a parturient woman in labor [in Chinese]. *Hu Li Za Zhi* 2006; 53:98-103.
8. Leung RW, Li JF, Leung MK, et al. Efficacy of birth ball exercises on labour pain management. *Hong Kong Med J* 2013; 19:393-9.
9. Dick-Read G. Childbirth without fear: the principles and practice of natural childbirth. UK: Pinter & Martin; 2005.
10. Johnson RC, Slade P. Obstetric complications and anxiety during pregnancy: is there a relationship? *J Psychosom Obstet Gynaecol* 2003; 24:1-14.
11. McGrath SK, Kennell JH. A randomized controlled trial of continuous labor support for middle-class couples: effect on cesarean delivery rates. *Birth* 2008; 35:92-7.
12. Swiatkowska-Freund M, Kawiak D, Preis K. Advantages of father's assistance at the delivery [in Polish]. *Ginekol Pol* 2007; 78:476-8.
13. Nichols MR. Paternal perspectives of the childbirth experience. *Matern Child Nurs J* 1993; 21:99-108.
14. Donovan J. The process of analysis during a grounded theory study of men during their partners' pregnancies. *J Adv Nurs* 1995; 21:708-15.
15. Langer A. Continuous support for women during childbirth: RHL practical aspects (last revised: 5 Sep 2007). The WHO Reproductive Health Library; Geneva: World Health Organization.