original article

Saudi women's acceptance and attitudes towards companion support during labor: Should we implement an antenatal awareness program?

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BACKGROUND AND OBJECTIVES: Despite the known benefits of support during chilbirth, most hospitals in Saudi Arabia do not allow a companion during labor. This can be due to cultural beliefs among pregnant Saudi women. The aims of this study are to describe Saudi women's preferences towards supportive companions during labor and to explore their attitudes and knowledge about the importance of support during childbirth.

DESIGN AND SETTING: Prospective cohort study conducted in three governmental tertiary hospitals within Riyadh.

SUBJECTS AND METHODS: Women who consented were interviewed during their postpartum hospital stay using a validated standardized Arabic questionnaire. Participants were asked about their preferences and attitudes towards companions during childbirth, as well as about their knowledge on the importance of such support.

RESULTS: Of 402 women who participated in the study, 182 women (45.3%) preferred the presence of a companion during childbirth and only 57 of all interviewed women (14.2%) had ever had a supportive companion during any of their previous childbirths. The mother (58%) or husband (51%) was the most preferred person as a childbirth companion. Age, level of educational, or antenatal, intrapartum or postpartum status had no impact on their decision. However, women who had some sort of antenatal educational classes and/or read educational material about childbirth were more likely to prefer support during labor. More than one-third of participants (35.9%) thought that having a companion as support during labor would not help, but the most common reason for not preferring to have a companion was their fear of being exposed most of the time to their companion (64.1%).

CONCLUSIONS: A significant percentage of surveyed Saudi women preferred not to have a supportive companion during childbirth. The reason might be a lack of understanding of the positive role of a companion during childbirth or because of cultural beliefs. Education of women during their antenatal care about the importance and the implementation of such a practice are warranted.

The labor and delivery experience is one of the most significant and stressful experiences in a woman's life, and can have strong physical, emotional, and psychological effects.[1] A woman's satisfaction with her childbirth experience has immediate and long-term implications for her health and the well-being of her newborn. Many factors can improve the satisfaction and brighten the experience of childbirth including more control of labor pain, higher levels of personal control, childbirth preparations, having expectations met, and having a companion of choice.[2,3]

Many studies have highlighted the benefits of support, both physical and psychological during labor, on the mother and her child including reduced length of labor,[4-7] fewer emergency cesarean deliveries,[5,6,8] fewer instrumental-assisted vaginal deliveries;[5-7] a reduced need

for pain medication[5,7] and reduced need for augmentation of labor. [4] The kind of support women may benefit from is mainly physical and emotional.[7] What appeared more important, however, were the psychological and emotional expressions of caring, empathy and sympathy.[7,8] In addition, Bowers have reviewed 17 qualitative studies and described the importance of social support in pain control because the presence of a supportive person helps the mother feel that pain was more bearable and that they can do something about it, such as breathing and relaxation techniques.[9] In a Cochrane review article, the reviewers concluded that continuous support should be the norm rather than the exception and all women should be allowed and encouraged to have supportive people with them continuously during labor.[10] Such support has been an essential element of the labor and delivery systems of many Western countries. Some authors cannot imagine what would happen if women were left alone with no supportive companion during labor.[9] However, most developing countries do not routinely encourage women to have support during childbirth despite the existence of studies in some developing countries indicating clearly the importance of such practice. For instance, a study conducted in the United Arab Emirates to evaluate women's preference in psychosocial support during labor revealed a high preference for support.[4] Similar results were found in Jordan, Nigeria, South Africa and Iran.[1,6,11]

One of the main differences between developed and developing countries on the presence of a companion during childbirth can be the preferred person to attend childbirth. In Western countries, support by the husband is the standard procedure while in developing countries women prefer the support of a female relative; support by the husband is neither acceptable nor appreciated.[4] This is probably a reflection of the differences in family structure, relationships and ties. There are also sociocultural and religious barriers in Eastern societies for the presence of males, even the husband, during the intimate period of labor and delivery when the mother is continuously exposed.

In Saudi Arabia, most governmental hospitals do not have a clear policy on permitting the presence of a supportive companion, such as a family member or a friend, during childbirth and there is little chance of provision of one-to-one nursing care because of staff shortages, which leaves laboring women alone for intermittent periods of time, especially in the first stage of labor. Nonetheless, no study has been done to assess the acceptance of Saudi women and preferences for companion support during labor and their attitudes towards such practice. Thus, the aims of this study were to describe Saudi women's preferences towards a supportive companion during labor and to explore their attitudes and knowledge about the importance of support during childbirth.

SUBJECTS AND METHODS

This was a prospective cohort study conducted in three main governmental tertiary hospitals in Riyadh, Saudi Arabia, including a university hospital (King Khalid University Hospital, KKUH), a Ministry of Health Hospital (King Fahd Medical City, KFMC), and a military hospital (Riyadh Military Hospital, RMH). All of those hospitals have large maternity units and the total number of deliveries exceeds 20 000 per year collectively. The hospitals were chosen to catch a wide

Table 1. The demographic and reproductive characteristics of study sample (n=402).

	Did not prefer support (n=220)	Preferred support during labor (n=182)	*P*
Age, mean (SD)	29.7 (6.5)	28.2 (5.6)	NS
Educational level			
Illiterate (%)	7 (3.2)	5 (2.8)	NS
Secondary school or less (%)	107 (65.6)	82 (45.3)	NS
Diploma and higher (%)	104 (47.7)	94 (51.9)	NS
Place of residency			
Urban (%)	193 (87.7)	159 (87.4)	NS
Rural (%)	27 (12.3)	23 (12.6)	NS
Planned pregnancy (%)	104 (47.3)	93 (51.1)	NS
Parity median (range)	3 (1-9)	2.7 (1-7)	NS
No. prenatal visits (n, %)			
Never	4 (1.2)	3 (5.3)	NS
1-3	10 (2.9)	0 (0)	NS
4-6	49 (14.2)	4 (7)	NS
7 or more	281 (81.7)	50 (87.7)	NS
Obstetrical history			
Gestational DM (%)	36 (16.4)	28 (15.4)	NS
Hypertension (%)	6 (2.7)	2 (1.1)	NS
Previous cesarean (%)	17 (7.7)	10 (5.5)	NS

Table 2. Perinatal outcomes in study sample (n=402).

	Did not prefer support (n=220)	Preferred support (n=182)	*P*
Augmentation of labour	44 (20.2)	33 (18.1)	NS
Duration of labour hour (SD)	6.5 (3.5)	7.2 (3.8)	NS
Mode of delivery			
Spontaneous vaginal delivery	179 (81.4)	128 (70.3)	NS
Forceps-assisted	1 (.5)	1 (.5)	NS
Vacuum-assisted	8 (3.6)	12 (6.7)	NS
Emergency cesarean section	32 (14.5)	41 (22.5)	NS
Episiotomy/ vaginal tear	113 (56.8)	41 (59.4)	NS
GA at delivery Mean (SD)	38.8(1.7)	38.6(2.4)	NS
Newborn birth weight	3081(570)	3075 (575)	NS
No. of newborn			
Single	215 (97.7)	179 (98.4)	NS
Twins	5 (2.3)	3 (1.6)	NS
Antepartum and postpartum complications			
Antepartum bleeding	12 (5.5)	13 (7.1)	NS
Preterm labour	25 (11.4)	21 (11.5)	NS
Abnormal fetal heart	16 (7.3)	13 (7.1)	NS
Extensive vaginal tear	1 (.5)	4 (2.2)	NS
Retained placenta	1 (.5)	0	NS
Postpartum hemorrhage	3 (1.4)	6 (3.3)	NS
Fetal distress (deceleration)	25 (11.4)	27 (14.8)	NS
Admission to NICU	12 (5.5)	13 (7.1)	NS

variety of Saudi citizens from different socioeconomic and cultural backgrounds. Nonetheless, all patients had access to free antenatal care of similar standards in those hospitals, but none of the chosen hospitals had clear rules allowing the presence of a companion with laboring women. The research ethics committee of the university hospital approved the research protocol, which was accepted by the other hospitals.

Women who delivered vaginally in those hospitals between 1 April 2010 and 30 June 2010 and who agreed to participate were enrolled in the survey. Women who delivered by elective cesareans were excluded. The study sample size was conveniently selected in line with previous studies designed to evaluate women's attitudes towards psychosocial support in labour.

Data collection consisted of a structured questionnaire with fixed-choice questions generated after a review of the English database followed by pilot testing of the questionnaire. Then this English version was translated and validated into an Arabic version. The Arabic version was, as well, pilot tested on 20 randomly selected mothers to assess the clarity of the questions and suitability for the target population and to determine if further questions were needed. The questionnaire was then modified according to the received responses. The final questionnaire consisted of 35 items that included data about sociodemographic characteristics and reproductive lifestyle variables, antenatal preparation for delivery, preferences and attitudes and knowledge of support during childbirth, and about overall satisfaction with the index childbirth experience. Participants were interviewed during their postnatal stay by one of the investigators. All answers were kept anonymous and confidential. A copy of the questionnaire is available from the corresponding author upon request. Maternal obstetric history, details of the index delivery such as intrapartum events (including duration of labor, type and frequency of analgesia used during labor, mode of delivery and intrapartum complications) and neonatal outcome were obtained from the hospital records of study subjects by the same investigator who conducted the interview.

Data were analyzed using statistical package of social science (SPSS Inc, IBM, Armonk, NY USA version 11). The differences between proportions were examined by the chi-square test and Fisher exact test when the sample size was small. Differences between means were compared using the *t* test. The measure of association between variables was assessed by correlation coefficient. For all analysis, a *P* value of <.05 was considered statistically significant.

RESULTS

Of 402 women who participated in the study, 57% delivered at KKUH, 33% at RMH, and 10% at KFMC. The mean age of all participants was 29 years (range:,17-47 years). The majority of participants were married (98.8%), living in Riyadh (87.6%), and multiparas (64.7%). Of the 402 women, 182 participants (45.3%) preferred the presence of companion for support during childbirth while 220 women (54.7%) did not prefer the presence of any companion. **Table 1** shows the demographic and reproductive characteristics of the study sample. Among women who preferred support during childbirth, 27% (49/182) had support during childbirth while only 3.6% of the group (8/220) who were not in favor of having a companion had ever had such

support during any of their childbirth (P=.001). The percentage of women with a preference for having support during childbirth was almost similar in the three hospitals (42.5% at KKUH; 42.5% at KFMC; and 54% at RMH). The obstetric outcomes are shown in **Table 2**. The frequencies of preterm labor, rate of induction of labor, instrumental delivery, emergency cesarean deliveries, episiotomy, perineal tear, postpartum bleeding, retained placenta and duration of labor were nearly the same in both groups. The birth weight, APGAR score, gestational age at delivery, fetal distress and admission to neonatal ICU were approximately similar in those who preferred the presence of the support and those who did not.

Age and educational level had no impact on the choice for having a companion. By dividing participants into two groups based on their educational level, the percentage of highly educated women (diploma and above) who preferred the presence of a companion during childbirth was similar to women who had less educational level (high school or less) (51.9% vs. 48.1% respectively, P=.375). Most of the participants who preferred companionship had attended antenatal care classes or they had read more on childbirth (154/182; 84.6%) than those who did not prefer such support (163/220; 74%), which was significant (P=.03). Primipara women preferred to have support more than multiparas (61.3% vs. 36.5%; P<.0005). A significant increase in the rate of analgesia use (P=.01) was noted in those reported to prefer having support than those who did not, which means that their decision of a preference for support might be affected by the increased pain. The perinatal outcome of the index pregnancy is summarized in **Table 2**.

The attitudes of women who preferred to have companion during childbirth showed that 88% preferred the presence of no more than one companion and 75.9% preferred that their companion had a past experience of giving support, but only 14% preferred that their companion work in the medical field. Most women preferred having their mothers (58%) or husbands (51%) as their companion if they were given the choice of more than one companion. The multiple selection answers to this question are detailed in **Figure 1**. Most (91.8%) preferred to have a companion to provide a psychological support, 45% wanted physical support, 34% wanted educational support and 34% thought that a companion would help them in making better decisions during labor.

Reasons for not wanting the presence of a companion during childbirth included preferring that no one see them during childbirth (64.1%) or they thought that a companion would not help them (35.9%) or they thought that the companion may suffer psychological damage upon attending a childbirth (35.9%); 12.3% of women felt that they did not need any help and only 3.2% reported that they did not have someone who could help them personally.

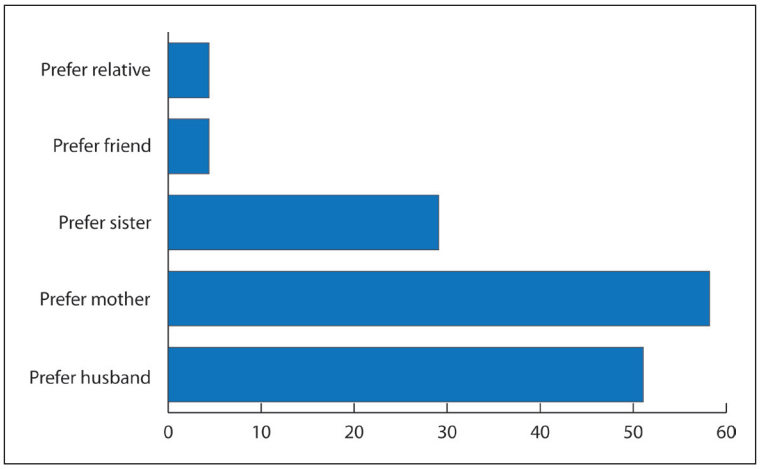

Figure 1. Percentage of women who prefer support during childbirth based on their preferred person to be their companion

Upon questioning all women in the study about their worst experience in their last childbirth only 2.2% (n=9) reported the lack of support of a companion during childbirth; the most common response was labor pain (300/402; 74.8%).

DISCUSSION

Even though the importance and subsequently the promotion of support during labor has been noted for the past three decades,[4-8] most developing societies such as Saudi Arabia have isolated laboring women from their family and community contacts, leaving them deprived of the source they had traditionally relied on. This might be because of the cultural background in these societies. This survey is the first attempt to describe Saudi women's acceptance and attitudes towards the presence of a supportive companion during their childbirth and add some information from a Saudi population to the available data on Arabic societies.

In this study it was found that the percentage of women who prefer being accompanied during childbirth is not that high (45.3%). Only 14% of the total participants had ever had supportive companionship in a previous childbirth. In comparison to similar populations in Arabic countries the results of our study are much lower. For instance, a study conducted in United Arab Emirates[4] reported that 77% of laboring women preferred the presence of support during childbirth and

59% had a companion. Most likely this reflects the lack of understanding among surveyed Saudi women about the importance and benefits of having support during childbirth as well as the absence of a standardized policy in most governmental hospitals for allowing a companion to be with the mother during labor, which may be because caregivers are not advocating such practice or not giving the proper education or reading materials to pregnant women and their families about the role of companions during childbirth.

In our study, as expected, the mother of a laboring woman was the most preferred labor companion (58%) in contrast to studies from Western societies where support by the husband or partner during childbirth is more of a standard practice.[12-16] This is probably a reflection of the differences in family structure, relationships and ties. Nevertheless, the patient's husband was chosen by over half of our surveyed women, not like that found in the United Arab Emirates, a similar society. In that study, Mosallam et al reported that only 1.2% of women who had no companion during labor agreed that the husband was the best individual to offer psychosocial support to them during childbirth.[4]

In the absence of a nonprofessional companion during labor, medical and nursing staff support during labor was considered important by 70% (281/402) of the study subjects. This is similar to most previous studies.[13,17-19] However, professional support during labor may be less effective than that provided by non-trained individuals since physicians and nurses may become desensitized to the feelings of women in labor and therefore may adopt a more patronizing attitude, thereby blunting their capacity to communicate empathy. Hence, the professional ideology of the management of labor has to reflect an appreciation of the psychological and emotional processes the women undergo during delivery in addition to the technical aspects of management. This kind of attitude among multicultural medical and nursing staff towards the needs for psychological and emotional support to laboring women in Saudi governmental hospitals can help in a better understanding of the results, but such knowledge was not assessed in our study or any other before.

The overall satisfaction rate with the childbirth experience was relatively good, where 75% of women (302/402) were satisfied with the medical care provided. However, it was noted that the satisfaction rate was higher in women who had companion support in their last delivery. This finding is similar to that in reports of most previous studies.[13,14,17,20,21] Companion support was also more commonly appreciated by primiparous and younger women, as seen in other studies.[13,14,20,22,23] There was no correlation in our survey between preference for companion support and maternal educational level in contrast to some other studies, which demonstrated the importance of the educational level on the decision of the mother to be accompanied during childbirth.[8]

Assessing satisfaction with psychosocial care during childbirth in the immediate postpartum period using an interview-based questionnaire enables a larger population of women to be sampled, and is inexpensive. The findings in our study, therefore, clearly indicate the need for further longitudinal studies of the experiences and preferences of companion support during childbirth in other Arabic societies. Our study did not investigate women who delivered in private hospitals, who probably had a choice of having a companion during childbirth. In addition, a larger number of Saudi women with sampling from different regions in Saudi Arabia might give more global view that will enable us to generalize the results in Saudi Arabia.

In conclusion, a significant percentage of surveyed Saudi women who had a previous experience of childbirth did not prefer the presence of a supportive companion during childbirth. This seems to be because of the lack of understanding of the positive role of a companion during childbirth or because of cultural beliefs. Hence, active educational strategies for couples during the antenatal period are urgently needed in our society to teach pregnant women about the importance of having a supportive companion during labor and to motivate husbands to assist their wives and share their experience of childbirth. Nonetheless, without a proper understanding of women's preferences, caregivers and health policy makers might not be able to provide a satisfactory childbirth experience to women in Saudi Arabia. A good system of maternity care both antenatally and during childbirth should take into account women's preferences, and should enable women to give birth safely and humanely under the care of competent and supportive birth attendants and allow for the presence of a companion of women's choice during childbirth.

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REFERENCES

1. Khresheh R. Support in the first stage of labour from a female relative: the first step in improving the quality of maternity services. Midwifery. 2010;26(6):e21-e24.
2. Goodman P, Mackey MC, Tavakoli AS. Factors related to childbirth satisfaction. J Adv Nurs. 2004;46(2):212-219.
3. Hardin AM, Buckner EB. Characteristics of a positive experience for women who have unmedicated childbirth. J Perinat Educ. 2004;13(4):10-16.
4. Mosallam M, Rizk DE, Thomas L, Ezimokhai M. Women's attitudes towards psychosocial support in labour in United Arab Emirates. Arch Gynecol Obstet. 2004;269(3):181-187.
5. Morhason-Bello IO, Adedokun BO, Ojengbede OA, Olayemi O, Oladokun A, Fabamwo AO. Assessment of the effect of psychosocial support during childbirth in Ibadan, south-west Nigeria: a randomised controlled trial. Aust N Z J Obstet Gynaecol. 2009;49(2):145-150.
6. Kashanian M, Javadi F, Haghighi MM. Effect of continuous support during labor on duration of labor and rate of cesarean delivery. Int J Gynaecol Obstet. 2010;109(3):198-200.
7. Sauls DJ. Effects of labor support on mothers, babies, and birth outcomes. J Obstet Gynecol Neonatal Nurs. 2002;31(6):733-741.
8. Essex HN, Pickett KE. Mothers without companionship during childbirth: an analysis within the Millennium Cohort Study. Birth. 2008;35(4):266-276.
9. Campero L, Garcia C, Diaz C, Ortiz O, Reynoso S, Langer A. "Alone, I wouldn't have known what to do": a qualitative study on social support during labor and delivery in Mexico. Soc Sci Med. 1998;47(3):395-403.
10. Hodnett ED, Gates S, Hofmeyr GJ, Sakala C, Weston J. Continuous support for women during childbirth. Cochrane Database Syst Rev. 2011;(2):CD003766.
11. Brown H, Hofmeyr GJ, Nikodem VC, Smith H, Garner P. Promoting childbirth companions in South Africa: a randomised pilot study. BMC Med. 2007;5:7.
12. Arulkumaran S, Symonds IM. Psychosocial support or active management of labour or both to improve the outcome of labour. Br J Obstet Gynaecol. 1999;106(7):617-619.
13. Chalmers B, Wolman W. Social support in labor: a selective review. J Psychosom Obstet Gynaecol. 1993;14(1):1-15.
14. Kennell J, Klaus M, McGrath S, Robertson S, Hinkley C. Continuous emotional support during labor in a US hospital. A randomized controlled trial. JAMA. 1991;265(17):2197-2201.
15. Somers-Smith MJ. A place for the partner? Expectations and experiences of support during childbirth. Midwifery. 1999;15(2):101-108.
16. Zhang J, Bernasko JW, Leybovich E, Fahs M, Hatch MC. Continuous labor support from labor attendant for primiparous women: a meta-analysis. Obstet Gynecol. 1996;88(4 Pt 2):739-744.
17. Chalmers B, Wolman WL, Nikodem VC, Gulmezoglu AM, Hofmeyer GJ. Companionship in labour: do the personality characteristics of labour supporters influence their effectiveness. Curationis. 1995;18(4):77-80.
18. McCrea BH, Wright ME. Satisfaction in childbirth and perceptions of personal control in pain relief during labour. J Adv Nurs. 1999;29(4):877-884.
19. Klaus M, Kennell J, Berkowitz G, Klaus P. Maternal assistance and support in labour: father, nurse, midwife, or doula? Clin Consult Obstet Gynecol. 1992;4:211–217.
20. Langer A, Campero L, Garcia C, Reynoso S. Effects of psychosocial support during labour and childbirth on breastfeeding, medical interventions, and mothers' wellbeing in a Mexican public hospital: a randomised clinical trial. Br J Obstet Gynaecol. 1998;105(10):1056-1063.
21. Scott KD, Berkowitz G, Klaus M. A comparison of intermittent and continuous support during labor: a meta-analysis. Am J Obstet Gynecol. 1999;180(5):1054-1059.
22. Hofmeyr GJ, Nikodem VC, Wolman WL, Chalmers BE, Kramer T. Companionship to modify the clinical birth environment: effects on progress and perceptions of labour, and breastfeeding. Br J Obstet Gynaecol. 1991;98(8):756-764.
23. Madi BC, Sandall J, Bennett R, MacLeod C. Effects of female relative support in labor: a randomized controlled trial. Birth. 1999;26(1):4-8.