Effect of Presence of Trained Significance Others on Labor Outcomes and Mother's Satisfaction

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Abstract: Objective: To evaluate the Effect of Presence of trained significance others on labor outcomes and mother's satisfaction. Intervention study design the study was conducted at MCH of El-Basher Hospital and labor unit of El-Basher Hospital /Amman Jordon. Subjects: The total subjects of this study were 150 parturient women were divided into equal groups, intervention group 75 mothers who received supportive measures during labor by trained significance others choice and control group 75 mothers who not received Comfort measures during labor by trained significance others choice. A simple random sample was used. The data was collected through a period of 10 months started from July 2009 to April 2010 for 3 days per week starting at 9 am to 2 pm. Inclusion criteria were: primiparous pregnant women with a single, term live cephalic fetus; in active labor – cervical dilation ≥ 3 cm and ≤ 6 cm; intact membranes or amniorrhexis of ≤ 2 hours; uterine height < 40 cm; no evidence of cephalic-pelvic disproportion or fetal distress. Exclusion criteria were: unavailability of a Presence of trained significance others choice; fetal malformation; maternal disease and/or indication for elective Caesarean section. Criteria for significant other: educated, healthy, female. Results of the study revealed that mother's satisfaction, a highly significant relation was observed between intervention and control groups. There was significance difference between intervention and control groups concerning applying Comfort measures and knowledge regarding supportive measures, labor progress and effect in reducing the severity of labor pain and increase satisfaction and concerning mother's satisfaction, a highly significant relation was observed between intervention and control groups. Based on the results of the present study, the following can be recommended: Encourage and sensitize healthcare providers to adopt this practice in health institutions where such as supportive companion is not permitted or professional healthcare providers are designated to this role.

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.Keywords: trained significance others in the delivery room, labor, mother's satisfaction

1. Introduction

The rates of maternal and neonatal mortality and morbidity decreased as a consequence of the adoption of modern obstetric practices, especially during labor and delivery. However, obstetrical interventions continued to increase, particularly the rate of Caesarean sections. Active management is based on the assumption that the preventive management of events that may potentially result in adverse effects in the mother or the fetus reduces the morbidity rates of both ^[1].

Comfort care defined as the care given to prevent, control, or relieve side effects and improve the women comfort and quality of life. While continuous labor comfort refers to non-medical care of laboring women throughout labor and birth by trained person^[2]. Support provided during labor and delivery by professional healthcare workers, nonmedical female attendants and trained women (doulas) assigned to this task has been evaluated in controlled studies^[3]. Data suggest that the effects of support are associated with a reduction in the dissatisfaction or negative perception of women towards birth, in the use giving of analgesia/anesthesia, and in the frequency of instrumental vaginal delivery (forceps and vacuum extraction) and Caesarean section ^{[3].}

Based on scientific evidence, the World Health Organization recommends that the parturient should be accompanied by people she trusts and with whom she feels at ease possibly her partner, a friend, a doula, a nurse or midwife ^[4]. However, the effects of the comfort measures provided by the presence of the woman's chosen companion on her satisfaction, on the events of labor and delivery and on perinatal results have not yet been fully evaluated in controlled studies ^[5,6]. The usefulness of support and the type of support provided by family members, a partner or by friends of the woman have only been evaluated in observational studies ^[9].

A close female relative support a laboring women by providing emotional and physical comfort and staying by her continuously throughout labor and birth. Nurses work shifts so may not be present for an entire labor. In addition they have clinical responsibilities, and providing care to more than on laboring woman simultaneously ^[10]. Due to the paucity of evidence-based data available on the effects of the presence of a companion of the woman's choice during the birth process, especially in developing countries, this study was developed to evaluate the influence of this support provider on the satisfaction of the parturient with labor and delivery and on perinatal and breastfeeding outcomes in the twelve hours following delivery.

Several authors recommended pharmacological measures during labor but these measures may harm fetal heart rate and maternal condition as well as it is an expensive measure ^[8]. So advanced evidence based on medical and nursing practice recommended to use the natural measures to relief labor pain which is non-pharmacological measure, not harmful to mother and her fetus and not expensive specially in developing countries like Egypt.

Significant of the study:

Presence of trained significance other to comfort and support mothers during labor was recommended by many authors ^[11]. Presence of significance other will enhance satisfaction leading to comfort and relieving of labor pain making labor enjoy full experience, with better fetal maternal outcome. Nurses can utilize evidence based researches to promote practices and train significance other to comfort and support laboring women to relief pain and providing adequate comfort measures for mothers throughout labor experience

Supportive care during labor plays an important role in moving back to the private arena of childbirth and the positive role of women during labor ^[12]. In addition to Presence of trained significance others in the delivery room has been shown to be one of the most beneficial practices in maternity care. It involves emotional support, comfort measures. Information, reassurance, encouragement, therapeutic touch, gentle assistance during moving and changing positions in labor and telling what's happening and giving feedback about the labor progress. These measures may enhance physiologic labor processes as well as women's feelings of control and competence, thus reduce the need for obstetric intervention and help in fulfilling the wishes of safety for mother and babies ^[7]. For these above reasons, the study of the effect of presence of trained significance others on labor outcomes and mother's satisfaction.

Aim of the Study

To evaluate the Effect of Presence of trained significance others on labor outcomes and mother's satisfaction.

Hypothesis:

The Presence of trained significance others will increase mother's satisfaction and improve labor outcome.

2. Subjects and Methods Design:

An intervention study design was used to evaluate the Effect of Presence of trained significance others on labor outcomes and mother's satisfaction. **Setting:**

The study was conducted on parturient women and their significant other during the last month of pregnancy then at labor unit of El-Basher Hospital and MCH of El-Basher Hospital Amman Jordon.

Subjects:

The total number of mothers who admitted to the labor unit of El-Basher Hospital and MCH of El-Basher Hospital Amman Jordon in the year 2008 was 1350 mothers. This number involved normal and high risk cases. So according to the study criteria the desirable sample size was calculated to the 150 mothers using type 1 error=0.05 and power of 0.80 and assuming the standard deviation of the (NRS=2).

The total subjects of this study were 150 parturient women were divided into equal groups, intervention group 75 mothers who received comfort measures during labor by trained significance others choice and control group 75 mothers who not received comfort measures during labor by trained significance others.

Type of sample:

A simple random sample was used.

Inclusion criteria were: primiparous pregnant women with a single, term live cephalic fetus; in active labor – cervical dilation ≥ 3 cm and ≤ 6 cm; intact membranes or amniorrhexis of ≤ 2 hours; uterine height < 40 cm; no evidence of cephalicpelvic disproportion or fetal distress. Exclusion criteria were: unavailability of a Presence of trained significance others choice; fetal malformation; maternal disease and/or indication for elective Caesarean section. Criteria for significant other: educated, healthy, female

Sample Technique:

The data was collected through a period of 10 months started from July 2009 to April 2010 for 3 days per week starting at 9 am to 2 pm. The researcher introduced herself to the pregnant mothers and significant other obtained their consent to be recruited in the study after explaining the aim of the study. Each mother of the intervention group was interviewed individually by the researcher and provided by theoretical information about comfort measures during labor. The average time for filling each sheet was about 25 minutes depending on the response of the mother while the training significant other including 1 session to provide the theoretical information regarding labor supportive measures it assumed 30 minute. While 2nd session involved

training of significant other about comfort measures (back massage, breathing exercise, relaxation, teaching technique of bearing down, changing position, fluid intake, and immediate of breast feeding demonstrated on mothers herself. It was consumed 1 hour then the researcher assess significant other correct practice and if needed re-demonstration of measures was repeated to be sure that the significant other perfectly practices the comfort measures.

A card was given to the significant other including researcher phone number to be easily contacted with the researcher when parturient women admitted to labor unit in hospital.

Tools:

Two tools were used for data collection:

I. The first tool:

An interviewing questionnaire was developed based on the review of relevant literature, to evaluate the effect of presence of trained significance others on labor outcomes and mother's satisfaction.

Part 1:

Addressed information related to general characteristics data such as age, occupation, level of education.

Part 2:

Assessed mother's obstetrical histories.

Part 3:

Assessed mother's knowledge regarding containing information on: the activities involved in providing support to the woman (stay beside her, provide support, be affectionate, keep her calm, massage her, stimulate and encourage her), expected behavior when confronted with signs of tiredness, anxiety, concern, crying, screaming and/or the woman's feelings of inability to cope; compliance with regulations (use of standardized clothing, no eating, no smoking, no touching the equipment or material, contact the nursing staff if need to leave); and the possibility of requesting information from staff. The need to preserve the privacy of the other women was also emphasized. There were no specific instructions for the health professionals.

II. The second tool:

The tool was developed by the researcher for data collection after extensive review of the relevant literature. The outcomes included satisfaction, assessed by asking the woman about how she felt during labor and delivery (evolution of labor, having a presence of trained significance others or not, instructions received from doctors and nursing staff, healthcare provided and type of delivery). These questions were answered by choosing one of a sequence of five symbols with facial expressions corresponding to "very dissatisfied", "dissatisfied", "satisfied", "well satisfied" and "very satisfied".

24 hours post delivery at rooming-in care unit. For the purpose of analysis, satisfaction was considered to have been achieved whenever the answers of "well satisfied" or "very satisfied" were given ^[10,7,8]. We collected data on the following outcomes: duration of first stage of labor; amniotomy in relation to the time of hospital admission and cervical dilation: color of amniotic fluid; use of oxytocin in relation to cervical dilation; time of analgesia in relation to cervical dilation and time of admission to hospital: presence of functional dystocia and changes in fetal wellbeing; length of the second stage; time between hospital admission and delivery; time from analgesia until delivery; type of delivery (vaginal/Caesarean). Neonatal outcomes were: Apgar score at 1 and 5 minutes, birth weight, admission to the neonatal intensive care unit (NICU), and immediate motherinfant contact following delivery. Variables regarding breastfeeding were: the ability of the infant to take the breast and suckling in the delivery room and in the 12 hours following delivery, cracked nipples and the number of breast-feeds in the first 12 hours.

Ethical Considerations:

The study was carried out with co-operation of different levels of authority. An official letter was sent from the Dean of the Faculty of Nursing in Philadelphia University to the directors of El-Basher Hospitals explaining the aim of the study and the time of data collection seeking his permission for data collection. An official permission through written letters clarifying the purpose and sitting of the study was obtained from the directors of El-Basher Hospital. As an approval for data collection.

A written informed consent was obtained from the participants after explaining the purposes of the study, which include: no harm was occurring to participant, do not contradict with the cultural, traditional and religious issues, human rights were reserved, and data was confidential and used mainly for the purpose of the research. (It should be potted at the end of this topic)

Pilots study:

The pilot study was carried out 10 women of sample size to test the reliability and applicability of the tools, to identify any ambiguity of the questions and to evaluate the feasibility and clarity of the tools, and then the tools were modified according to the results of the pilot study.

Filed work:

- Development of tools for data collection after reviewing the related literature. The tool was revised for content validity by 5 experts in the field.
- The women's was selected by simple random according to the mentioned criteria.

- The researcher was meeting each woman and her trained significance others individually during the last month of pregnancy, to explain the aim of the study. The comfort measures included back massage, breathing exercise, relaxation, teaching technique of bearing down, changing position, fluid intake, and immediate of breast feeding.
- Beside discussion and lecture to improve trained significance others knowledge, brochure was used for teaching each significance others the comfort measures. Each trained significance others would receive brochure with information , to facilitate the learning and application
- While trained significance others practice training was conducted firstly by the researcher through role play approach utilization of comfort measures during labor on women then after that the trained significance others perform measures on the same women and if there was a mistake the researcher comfort re-demonstrate supportive measures again to be sure that the trained significance others understand the application of comfort measures.
- In labor unit the researcher stay beside the trained significance others while providing comfort measures to mother to be sure that she was conducted it perfectly, their performance was assessed by using observation checklist.
- Evaluation of labor progress and satisfaction for parturient women in both groups.

Limitation of the study:

- Three women and trained significance others were refused to attend the pre intervention session.
- Negative attitude of nurse's staff regarding presence of trained significance others during labor

3. Results

Table 1: show that, mean age of women in intervention and control groups was 20.40 ± 3.37 and 26.32 ± 4.29 years, respectively. Also, there were no significant differences among the two groups in the study regarding age, educational level and occupation.

Table 2: show that, mean age of trained women (significant other) in intervention and control groups was 24.40 ± 4.37 and 25.32 ± 4.29 years, respectively. Also, there were no significant differences among the two groups in the study regarding age, educational level and occupation.

Table 3: Illustrate that, most of significant other in pre antenatal classes had incorrect knowledge about definition of normal labor and importance of labor support (80% and 77.3%). While in post antenatal classes most of them had correct answer regarding both definition of labor comfort and importance of labor support (92% and 93.3%). Also significant difference were observed between pre and post antenatal classes (p<0.001)

Table 4 illustrates that, the intervention group most of significant other had correct knowledge about definition of labor support and importance of labor support (92% and 93.3%) than control group (73.3% and 80%). Also significant difference were observed between pre and post antenatal classes (p<0.001)

Table (5): Show that, there were significant differences among two studies group regarding to application of comfort measures among intervention and control groups (x^2 23.570, 3.955, 4.167, 6.543, 12.74, 4.67 and 3.967 respectively) *statistically significant *p* <0.05 **Statistically highly significant *p* <0.001

Table 6 shows that, most of mothers who were crying and screaming were lower (20%, 6.7% and 33.3, 46.7) in intervention group than control group respectively during degree of cervical dilatation. Meanwhile the rates of women calm were significant higher in intervention group than control group.

Table (7): show that, there were significant differences among two studies group regarding pain intensity in relation to cervical dilatation CX 3-4 cm (11.570, 0.054* respectively), CX 5-7 cm (13.348, 0.013* respectively) and CX 8-10 cm (12.671, 0.015* respectively)

Table (8): Means distribution among mothers according to their duration of labor/ hours among intervention and control groups. Show that the duration of labor during all stages of labor were significant difference among studied groups (p < 0.05, p < 0.001 respectively) for total hours

Table (9): show that, the mean of (APGAR score) at 5^{th} minute and at 10^{th} minute in intervention group were significant higher (6.9±1.1 and 8.8±1.3) than in control group (4.8±0.8 and 7.03±1.5).

Table (10): Regarding satisfaction with the birth experience, having a Significant trained other during labor and deliver were strongly associated with higher satisfaction in the intervention group. Also Show that, most of mothers in both groups were unsatisfied with nurses (55, 45 respectively). The women of this group were also more satisfied with the care they received during labor, with the medical guidance given during labor, with care received during delivery, and with vaginal delivery, than women in the control group.

Table (1): Number and percent distribution of women according to their general characteristics among the intervention and control groups

Items		rvention oup n75	Contr	ol group n75	x^2	P value
	No	%	No	%		
Age/ year						
> 20	21	28%	15	20		
21 - 30	40	53.3	43	57.3	3.83	>0.05
31 - 40	10	13.3	12	16		
< 40	4	5.3	5	6.7		
Educational level						
Preparatory	34	45.3	28	37.3		
Secondary	26	34.7	33	44	2.90	>0.05
University	15	20	14	18.7		
Occupation						
House wife	50	66.7	55	73.3	1.35	>0.05
Working	25	33.3	20	26.7		

 Table (2): Number and percent distribution of significant others according to their general characteristics among the intervention and control groups

Items		rvention oup n75	Control	group n75	*2	P value
	No	%	No	%		
Degree of relation of the significant others						
Mother	40	53.3	35	46.7		
Sister	25	33.3	27	36	3.85	>0.05
Friend	10	13.3	13	17.3		
Age/ year					•	•
21 - 30	10	13.3	17	22.7		
31 - 40	48	64	50	66.7	3.55	>0.05
< 40	17	22.7	8	10.6		
Educational level						
Preparatory	45	60	38	50.7		
Secondary	20	26.7	25	33.3	3.92	>0.05
University	10	13.3	12	16		
Occupation						
House wife	65	86.7	67	89.3	1.92	>0.05
Working	10	13.3	8	10.7	1	

 Table (3): Number and percent distribution of significance others in intervention group according to their knowledge regarding comfort measures pre and post intervention classes

Items	Pre intervention n 75		Post intervention n 75		x ²	P value
	No	%	No	%		
Definition of labor support		-				
Correct	15	20	69	92	17.45	0.001**
In correct	60	80	6	8 %		
Importance of labor support					•	
Correct	17	22.7	70	93.3	18.57	0.001**
In correct	58	77.3	5	6.7		

**Statistically highly significant P<0.001

Table (4): Number and percent distribution according to their knowledge regarding comfort measures among the intervention and control groups

Items		Intervention Group n75		Control group n75		P value
	No	%	No	%		
Definition of labor support						
Correct	69	92	20	26.7	23.35	0.001**
In correct	6	8	55	73.3		
Importance of labor support						
Correct	70	93.3	15	20	87.78	0.001**
In correct	5	6.7	60	80		

Comfort measures			tion group 175			Control n 7		æ ²	P value	
Connort measures	correct				Correct		In correct			
	no75	%		%	no75	%		%		
Breathing exercise	69	92	6	8	10	13.3	65	86.7	23.570	0.000**
Bearing down	74	98.7	1	1.3	38	50.7	37	49.3	3.955	0.052*
Back massage	66	88	9	12	20	26.7	55	73.3	4.167	0.054*
Change position	70	93.3	5	6.7	30	40	45	60	6.543	0.012*
Fluid intake	65	86.7	10	13.3	10	13.3	65	86.7	12.74	0.001*
Relaxation	59	78.7	16	21.3	50	66.7	25	33.3	4.67	0.054*
Early attachment	70	93.3	5	6.7	45	60	30	40	3.967	0.057*
*statistically significant $P < 0.05$ **Statistically highly significant $P < 0.001$										

Table (5): Number and percent distribution of study sample regarding to application of comfort measures among intervention and control groups

statistically significant P < 0.05

Statistically highly significant P < 0.001

Table (6): Number and percent distribution of mothers according to vocalization during their degree of cervical dilatation among intervention and control groups

	Interven	tion group	Contro	l group	x^2	P value
Items	n	75	n	75		
	No	%	No	%		
CX 3-4 cm		•	•		-	
Crying	15	20	25	33.3	4.891	0.015*
Screaming	5	6.7	35	46.7	4.345	0.049*
Calm or silent	55	73.3	15	20	4.089	0.053*
CX 5-7 cm						
Crying	10	13.3	25	33.3	3.456	0.056
Screaming	15	20	40	53.3	3.761	0.048*
Calm or silent	50	66.7	10	13.3	4.045	0.044*
CX 8-10 cm						
Crying	12	16	40	53.3	4.248	0.045*
Screaming	20	26.7	30	40	4.296	0.045*
Calm or silent	43	57.3	5	6.7	4.950	0.038*

*statistically significant p<0.05

Table (7): Number and percent distribution of mothers according to their intensity of labor pain among intervention and control groups in relation to cervical dilatation

Degree of pain		Intervention group n 75		ol group 1 75	x ²	P value
	No	%	No	%		
<u>CX 3-4 cm</u>						
Mild pain	66	88	25	33.3	11.570	0.054*
Moderate pain	5	6.7	35	46.7		
Sever pain	4	5.3	15	20		
<u>CX 5-7 cm</u>						
Mild pain	30	40	10	13.3	13.348	0.013*
Moderate pain	40	53.3	40	53.3		
Sever pain	5	6.7	25	33.3		
CX 8-10 cm		-				
Mild pain	10	13.3	5	6.7	12.671	0.015*
Moderate pain	55	73.3	20	26.7	1	
Sever pain	10	13.3	50	66.7		

*statistically significant p<0.05

Table (8): Means distribution among mothers according to their duration of labor/ hours among intervention and control groups

Stages duration /hours	Intervention group n 75	Control group n 75	t	P value
First stage	10.48±3.02	13.5± 2.6	5.14	0.05*
Second stage	0.99± 0.50	1.745 ± 0.42	7.4	0.001**
Third stage	0.12 ± 3.89	0.140 ± 8.538	5.6	0.05*
Total /hours	10.96 ± 2.13	20.34 ± 2.60	18.8	0.001**

*statistically significant p<0.05

**Statistically highly significant P<0.001

Table (9): Number and percent distribution of neonatal outcome (APGAR score) among inter	rvention and control groups
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Items		ion group 75	Control n 7		t	P value
	No	%	No	%		
(APGAR score) at 1 min		•			•	
≥6	3	4	30	40		
6-8	45	60	35	46.7		
≥ 8	27	36	10	13.3		< 0.05
Mean ±SD	6.9	±1.1	4.8±0	0.8	5.6	
(APGAR score) at 5 th min						
≥ 6	0	0	25	33.3		
6-8	25	33.3	35	46.7		< 0.05
≥ 8	50	66.7	15	20]	
Mean ±SD	8.8	±1.3	7.03±	:1.5	2.6	

*statistically significant p<0.05

 Table (10): Number and percent distribution of mothers according to their level of satisfaction among intervention and control groups

Items	Inter	vention gr n 75	oup	(Control grou n 75	р	x^2	P value
	SA	AD	NS	SA	AD	NS		
General satisfaction	66	6	3	5	25	45	8.893	0.019*
Satisfied with self	45	10	20	5	10	60	7.340	0.057*
Satisfied with baby	69	4	2	40	20	15	14.371	0.011*
Satisfied with nurse	9	11	55	10	20	45	9.584	0.008*
Satisfied with significant other	70	4	1	50	15	10	8.66	0.013*
Satisfied with physician	45	20	10	2	8	65	10.515	0.010*
*							·	

*statistically significant p < 0.05; NB: SA= satisfy, AD= satisfy to some degree, NS = not satisfy

4. Discussion

The labor and delivery experience is one of the most significant events in women's life, and can have strong physical, emotional, and psychological effects. Traditionally, women experienced childbirth surrounded by significant others. These are usually women from their own family. This study aimed to evaluate the effect of presence of trained significance others on labor outcomes and mother's satisfaction.

These results show that the support provided by a presence of trained significance others choice during labor and delivery had a positive effect on her satisfaction with the birth experience. Although the opinion of the health professionals were not assessed systematically, it seems that this intervention was well-accepted by them. No previous training was offered to the health workers, and the trained significance others underwent no prior preparation. Therefore, the assistance the women in both groups received during labor and delivery was the standard care routinely provided in that hospital, and there were no changes in management. It is important to emphasize that this is not a study about doulas and if on one hand there is a general belief that a labor presence of trained significance others has always positive effects, there are,, on the other hand still a lot of health facilities where presence of trained significance others are not allowed, especially in developing settings. It was and still it is expected that the results of this study could help providers to acknowledge and respect women's rights during birth.

These results are explained by Hodnett et al [21] who stated that antenatal preparation and classes include information about childbirth process, option for medication based on pain relief. The present study revealed that a significant improvement in presence of trained significance others knowledge regarding comfort measures in labor pre intervention and post intervention this finding may attributed to, that antenatal classes have a positive effect in improving presence of trained significance others knowledge. This is supported by results from **Choquette**^[26] who reported that, the embodied knowledge of companion as a first educator and trustworthy source of information form a basic source of knowledge. The current study showed a shorter duration of total hours in intervention group. Mother had less of fear, good improvement in presence of trained significance others knowledge regarding comfort measures in labor. This is supported by Eriksson et al. & Ministry of Health [24,25]

who stated that trained companionship contributes to reduce tension and shorten labor.

In the intervention group the majority of presence of trained significance others applied different supportive measures correctly for pain relief such as technique of bearing dawn, breathing exercise, changing position, relaxation these measures affect pain intensity and provide a sense of well being, sense of control, decreased tension, enhanced mood and provides more oxygen for mother and fetus Show that, there were significant differences among two studies group regarding to application of comfort measures among intervention and control groups this finding supported by several authors^[23,27] who reported that, breathing exercise increases relaxation and relaxation increase pain tolerance, reducing anxiety, decreased catecholamine response, increased uterine blood flow and decrease muscle tension.

In addition many investigators ^[16,22] reported that, the women in the experimental group felt a more positive pushing experience than the women in the control group. As presence of trained significance others applied different supportive measures correctly for pain relief such as technique of bearing dawn, give a sense of control and confidence to parturient mothers that they were always pushing in the right way and right time and their bearing down efforts were helpful. This allowed them to be calmly and efficiently coordinate push strongly for as long as possible in every contraction.

The finding of the present study revealed a statistically significant difference regarding Apgar score among intervention and control groups. This result was in the line with *Yuenyong et al* $^{[15]}$ who reported that, newborn babies were benefited from the support that the mothers were receiving in labor and babies are less admitted intensive care units. The present study also, found that the presence of trained significance others applied early attachment as one of comfort measures during labor. This is supporting the new evidence from WHO $^{[14]}$ for the importance of early contact as a good practice which is useful and should be encouraged in cases of low risk and normal birth

The present study also, found that, most of mothers in both groups were unsatisfied with nurses due to lack of information provided and attention given. Sometimes mothers are left alone during labor, due to the nurse's workload clinical responsibilities paperwork and shortage in nursing staff and this may cause women's dissatisfaction with their healthcare and childbirth experience. Also, some researcher ^[13] Reported that satisfaction with childbirth has been linked to the amount of support provided to parturient mothers, the relationship between client and caregiver.

Satisfaction was more in intervention group than control group, this may due to knowledge and good preparation of presence of trained significance others applied different supportive measures correctly, so mothers expectation regarding childbirth are met. Also, may investigators^{20]} who stated that mothers, whose expectations about childbirth were met, are more satisfied, labor support can increase mother's positive experiences and level of satisfaction with child birth.

In the intervention group, women's greater satisfaction with the guidance received from the doctors during labor has also been identified in another study with a different population, evaluated when the woman was accompanied by a person of her choosing ^[18]. When doulas or professional healthcare workers are the support providers, instructions are generally supplied by these individuals ^[19,28]. Support also increased satisfaction with the care received during labor and delivery, and this finding is in agreement with data already reported ^[6]. When the women received support from nurses.

So our results stressed the importance of utilization of supportive measures. The presence of presence of trained significance others of the woman's choice had a positive influence on her satisfaction with the birth process and did not interfere with other events and interventions, with neonatal outcome or breastfeeding.

Conclusion & Recommendation

The fact that the women with support reported higher levels of satisfaction with the medical information/guidance they received indicates that perhaps there was a change in attitude. Perhaps because there was someone else in the room, medical staff were more forthcoming and user-friendly than when no support person was present. The comfort measures have a positive effect in reducing labor pain, increase women satisfaction and improve labor outcome.

In this study may provide a basis for implementing this practice to evaluate the Effect of Presence of trained significance others on labor outcomes and mother's satisfaction. Concerning mother's satisfaction, a highly significant relation was observed between intervention and control groups. There was significance difference between intervention and control groups concerning applying comfort measures and knowledge regarding supportive measures, labor progress.

Based on the results of the present study, the following can be recommended:

Encourage and sensitize healthcare providers to adopt this practice in health institutions where such as supportive companion in not permitted or professional healthcare providers are designated to this role.

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References

- Arulkumaran S, Symonds IM; (1999): Psychosocial support or active management of labour or both to improve the outcomes of labour. Br J Obstet Gynaecol, 106:617-9.
- 2. Simkin, P., and Bolding, A., (2004): Update Women's Health, 49(6):489-504.
- Enkin M, Keirse MJ, Neilson JP, Crowther C, Duley L, Hodnett E, Hofmeyer J; (2000): A guide to effective care in pregnancy and childbirth. 3rd edition. New York: Oxford on non pharmacologic approaches to relieve labor pain and prevent suffering. J Midwifery University Press.
- Hodnett ED, Gates S, Hofmeyr GJ, Sakala C; (2003): Continuous support for women during childbirth (Cochrane Review). In The Cochrane Library. Oxford: Update Software; CD003766.
- World Health Organization; (1996): Care in normal birth: a practical guide (Maternal and Newborn Health/Safe Motherhood Unit). Geneva: WHO;
- Brüggemann OM, Parpinelli MA, Osis MJD (2005): Evidence on support during labor and delivery: a literature review. Cad Saúde Pública, 21:1316-27.
- Hodnett ED, Lowe NK, Hannah ME, Willan AR, Stevens B, Weston JA, Ohlsson A, Gafni A, Muir HA, Myhr TL, Stremler R, (2002): Nursing Supportive Care in Labor Trial Group: Effectiveness of nurses as providers of birth labor support in North American hospitals: a randomized controlled trial. JAMA, 288:1373-81.
- Odalea M Bruggemann, Mary A Parpinelli, Maria JD Osis, Jose G Cecatti and Antonio SC Neto; (2007): Support to woman by a companion of her choice during childbirth: a randomized controlled trialReproductive Health, 4:5 doi:10.1186/1742-4755-4-5
- 9. Hodnett, ED., Gates, S., and Hofmeyr, GJ., et al (2011): Continuous support for women during childbirth. The cochrance database of systematic reviews, Issue 2:CD003766
- Akerman, N. and Dresner, M. (2009): The management of break through pain during labor, CNS Drugs; 23(8):669-679.
- 11. Hodnett ED (2002): Pain and women's satisfaction with the experience of childbirth: a systematic review. Am J Obstet Gynecol, 186:S160-72.
- 12. El-Nemer A. (2003). Helping from the heart A feminist Ethnography of Egyptian Women's Childbirth Experiences, Thesis submitted to school of health studies division of Midwifery and Women's Health in partial fulfillment of doctorate degree in nursing science Obst and Gyne. University of Bradford, uk.2003
- Goodman, P., Mackey, MC., and Tavakoli, AS., (2004): Factors related to childbirth satisfaction. Journal of Advanced Nursing, 46:212-219.

- Christianes, W., and Bracke, P., (2007): Assessment of social psychological determinants of satisfaction with childbirth in a cross-national perspective. BMC pregnancy and childbirth,5,20 htt://www.biomedcentral.com/1471-2393/5/20
- Abushaikha, LA., and Oweis, A.,(2005): Jordanian pregnant women's expectations of their first childbirth experience, International Journal of Nursing Practice, 10(6):264-271
- World Health Organization, (2000): Care in normal birth: a practical guide (Maternal and Newborn Health/Safe Motherhood Unit). Geneva: WHO;
- 17. Yuenyong, S., Jirapaet, V., and Brien, S., (2008): Support from a close female relative in labor: the ideal maternity nursing intervention in Thailand, Journal Med Assoc Thai, 91(2): 253-260.
- Ranger, L., Altman, D., and Tyden, T., et al., (2006): Comparison of the maternal experience and duration of second stage of labor comparing two upright delivery position a randomized controlled trial. British Journal of Obstetrics and Gynecology, 113-(2): 165-170.
- Kennell J, McGrath S.(1993): Labor support by a doula plus father vs father alone for middle-income couples – the effect on perinatal outcomes. J Dev Behav Pediatr, 14:277.
- Langer A, Campero L, Garcia C, Reynoso S. (1998): 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, 105:1056-63.
- 21. Gagnon A, Waghorn K, Covell C. (1997): A randomized trial of one-to-one nurse support of women in labor. Birth, 24:71-7.
- Mosallam M, Rizk DEE, Thomas L, Ezinmokhai M. (2004): Women's attitudes towards psychosocial support in labor in United Arab Emirates. Arch Gynecol Obstet, 269:181-7.
- Gordon NP, Walton D, Mcadam E, Derman J, Gallitero G, Garrett L.(1999) : Effects of providing hospital-based doulas in health maintenance organization hospitals. Obstet Gynecol, 93:422-6.
- Lai, ML., Lin, KC., and Li, HY., (2009): Effect of delayed pushing during the second stage of labor on postpartum fatigue and birth outcomes in nulliparous women. Journal of Nursing Research, 17(1): 62-72.
- 25. Hunter, L., (2009): A descriptive study of being with women during labor and birth, 54(2): 111-118.
- Eriksson, C., Westman, G., and Hamberg, K., (2006): Content of childbirth related fear in swedish women and men analysis of an open ended question. Journal of midwifery and women's health, 51(2): 112-118.
- 27. Ministry of Health., (2009): companionship at birth policy, htt://health.gov.bz/www/index.php/quavision/136-quality-assurance/companion-at-birth-policy-document
- 28. Choquette, L.,(2007): Prenatal education in Ontario, Better Practices. www.beststart. Org/events/detail/prenatal eduform.htm
- 29. Escott, D., Slade, P., and Spiby, H., (2009): Preparation for pain management during childbirth: the psychological aspects of coping strategy development in antenatal education clinical psychology review, 29(7): 617-622.

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