ORİJİNAL ARAŞTIRMA ORIGINAL RESEARCH

DOI: 10.5336/healthsci.2021-86701

Effects of Spouse and Mother/Friend Support on Birth Process: Descriptive Cross-Sectional Study

Eş ve Anne/Arkadaş Desteğinin Doğum Sürecine Etkisi: Karşılaştırmalı Tanımlayıcı Araştırma

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ABSTRACT Objective: This research was conducted to examine the effect of spouse, mother/friend and routine clinical care support on delivery process at birth. **Material and Methods:** This descriptive/cross-sectional study was completed with 300 primipara pregnant women who applied to İstanbul Esenler Gynecology and Pediatrics Hospital. Participants are divided into 3 groups according to the people they want to be there for support. The first group is spouse support, the second group is mother/friend support and the third group is women who want routine clinical care. In the collection of the data, personal information form and Visual Analog Scale (fear/anxiety, coping with pain, birth satisfaction) developed by the researchers in line with the literature were used. **Results:** In the transition phase of labor, anxiety score was lower in the group receiving spouse support (7.08±0.88) compared to the mother/friend (8.74±0.65) and the control group (8.72±0.65) (p<0.00). The lowest score in coping with pain in the transition phase (1.83±0.57) was in the group receiving routine clinical care. The delivery time of the group receiving routine clinical care (298.00±32.22 minute) was longer than the group receiving spousal support and mother/friend support (p<0.05). **Conclusion:** Spouse support at birth decreases anxiety, increases coping with pain and shortens delivery time. Spousal support for eligible women can improve their delivery process. Midwives should be empowered to provide supportive care and be more effective in coping with pain.

Keywords: Birth; spouse support; birth support; mother friend support; labor

ÖZET Amaç: Bu araştırma, doğumda eş, anne/arkadaş ve rutin klinik bakım desteğinin doğum sürecine etkisini incelemek amacıyla yapılmıştır. **Gereç ve Yöntemler:** Tanımlayıcı-kesitsel tipte yapılan araştırma, İstanbul Esenler Kadın Doğum ve Çocuk Hastanesine 300 primipar gebe ile tamamlanmıştır. Katılımcılar travay sürecinde yanında destek amacıyla bulunmasını istedikleri kişilere göre 3 gruba ayrılmıştır. Birinci grup eş desteği, ikinci grup anne/arkadaş desteği ve üçüncü grup rutin klinik bakım isteyen kadınlardan oluşturulmuştur. Verilerin toplanmasında araştırmacılar tarafından literatür doğrultusunda geliştirilen birey tanıtım formu ve Görsel Analog Ölçeği (korku/anksiyete, ağrı ile baş etme, doğum memnuniyeti) kullanılmıştır. **Bulgular:** Doğumun geçiş fazında anksiyete puanı eş desteği alan grupta (7,08±0,88), anne/arkadaş (8,74±0,65) ve kontrol grubuna (8,72±0,65) göre daha düşüktü (p<0,00). Geçiş fazında ağrı ile baş etmede en düşük puan (1,83±0,57) rutin klinik bakım alan grupta idi. Rutin klinik bakım alan grubun doğum süresi (298,00±32,22 dk) eş desteği ve anne/arkadaş desteği alan gruptan daha uzundu (p<0,05). **Sonuç:** Doğumda eş desteği anksiyeteyi düşürmekte, ağrı ile baş etmeyi artırmakta ve doğum süresini kısaltmaktadır. Uygun olan kadınların doğumlarında eş desteği almaları doğum süreçlerini iyileştirebilir. Ebeler, destekleyici bakım verme konusunda güçlendirilmeli, ağrı ile baş etmede daha etkin olmaları sağlanmalıdır.

Anahtar Kelimeler: Doğum; eş desteği; doğum desteği; anne/arkadaş desteği; travay

The act of birth is unique, complex, multidimensional and with the woman's body, emotions it is one of the most important experiences she had.[1] This unique experience to be remembered positively, it must be supported at birth. This support can be in the form of physical, emotional, information support. Physical support involves taking a warm shower, listening to music, giving the woman different positions, applying cold and warm, touching (massage, holding), adjusting the temperature and light of the room, ensuring hygiene. Emotional support care for the woman in labor includes the friendly, open, kind, positive warm communication of the giver, it involves giving confidence. Emotional support pro-

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Peer review under responsibility of Turkiye Klinikleri Journal of Health Sciences.

Received: 19 Nov 2021 ***Received in revised form:*** 24 May 2022 ***Accepted:*** 30 May 2022 ***Available online:*** 08 Jun 2022

vides positive thinking, reduces the feeling of fear and anxiety. Distraction with the presence of the supporting person, effective care, can give emotional support with his methods, praise and supportive words. Information support, developments about the individual's birth process and what needs to be done is the presentation of information. Information support to women in their actions will enable women to participate in decisions and it will create the feeling of control. While healthcare professionals provide information support, emotional and physical support can be safely given by another person that the woman wants to be with.[1-3] In the literature, the importance of midwife support during birth is emphasized. There may also be requirements that the midwife cannot meet during labor.[1] This lack in the woman's wife can easily be met by family or friend. In our country, limited number of studies are available on the effect of the person providing support on the birth process.[3,4] In this study, when the spouse and friend are included in the birth process, possible effects were examined.

MATERIAL AND METHODS

The study was carried out with primiparous 300 women at İstanbul Esenler Gynecology and Pediatrics Hospital between November 2018 and March 2019. The sample size was calculated according to the effect width (w=0.76) and the two-tailed hypothesis method, taking into account the number of people who experienced their first pregnancy in the health institution where the research was conducted. In the Turkey IBM SPSS (USA) trial program, it was planned to recruit 100 women to each group by performing power analysis. One-way ANOVA was used to compare three-group data. The hospital, which has both a mother and baby friendly title, provides high quality midwifery care support. Because of these two features, women are also liable to receive support from someone else besides the midwife. In line with the choices of women, it was provided to receive routine clinical care from their spouses, mothers/friends or only. The groups were not given any training on birth support. No pharmacological methods were used to cope with any pain along the labor. The workflow is given in Figure 1. The necessary ethical approval from Marmara University Health Sciences Institute Ethics Committee (November 19, 2018/208) and institutional permission from the Provincial Health Directorate (December 26, 2018/711211201-1800360751) were obtained for the research. The purpose of the study was explained to all women who met the sampling selection criteria and agreed to participate in the study. Verbal and written consent was obtained from all women participating in the study. The study was conducted in accordance with the principles of the Declaration of Helsinki. Pregnant women spend the birth process in single rooms created within the scope of the mother-friendly hospital.

INCLUSION CRITERIA

In active phase (dilation=4-5 cm and above) and hospitalized, who will have their first birth, having a single and healthy fetus, spontaneous vaginal delivery is planned, the fetus is in the longitudinal and vertex positions, there is no maternal and fetal complication that will affect labor, no risk of fetal anomaly, without early membrane rupture, they are the least literate and have no language-communication problem, pregnant women who agreed to participate in the research and received consent, pregnant women with the above-mentioned characteristics participate in the study.

EXCLUSION CRITERIA

Unable to adapt, who stopped working and want to leave the characteristics of pregnant women are given below. Personal Information Form and Visual Analog Scale (VAS) (fear/anxiety level, coping with pain and birth satisfaction), which were developed by the researchers in accordance with the literature, were used to collect the data. VAS is valid and reliable in all cultures. It is a scale that is made and can be applied easily. In this study, 10 cm vertical VAS was used and the place marked by the woman was taken as basis (Collins et al., 1997) pregnant women mentioned were not included in the study.[4]

RESULTS

The demographic characteristics of the participants are given in Table 1. Participants were randomly assigned to groups.

TABLE 1: Participants' characteristics (n=300).

	Spouse support		Mother/Friend support		Routine clinical care		Total		
	n	%	n	%	n	%	n	%	
Age group									
19-24 age	68	37.8	63	35.0	49	27.2	180	60.0	χ^2=8.083
25-34 age	32	26.7	37	30.8	51	42.5	120	40.0	p=0.018
The year of education									
8 year	90	38.5	70	29.9	74	31.6	234	78.0	χ^2=17.234
12 year	4	8.2	24	49	21	42.9	49	16.3	p=0.002
16 year	6	35.3	6	35.3	5	29.4	17	5.7	
Working status									
Yes	5	38.5	5	38.5	3	23.1	13	4.3	χ^2=0.643
No	95	33.1	95	33.1	97	33.8	287	95.7	p=0.725
Family type									
Nuclear	78	32.9	79	33.3	80	33.8	237	79.0	χ^2=0.121
Large	22	34.9	21	33.3	20	31.7	63	21.0	p=0.942
Chronic disease									
Yes	2	28.6	3	42.9	2	28.6	7	2.3	χ^2=0.293
No	98	33.4	97	33.1	98	33.4	293	97.7	p=0.864
Pregnant week									
32-37 preterm	62	30.8	63	31.3	76	37.8	201	67.0	χ^2=5.518
38-41 term	38	38.4	37	37.4	24	24.2	99	33.0	p=0.063
Planned pregnancy									
Yes	78	32.9	79	33.3	80	33.8	237	79.0	χ^2=0.121
No	22	34.9	21	33.3	20	31.7	63	21.0	p=0.942
Exercise during pregnancy									
Yes	91	34.6	84	31.9	88	33.5	263	87.7	χ^2=2.281
No	9	24.3	16	43.2	12	32.4	37	12.3	p=0.320
Pregnancy control									
1-3 times	17	37.8	14	31.1	14	31.1	45	15.0	χ^2=6.688
4-6 times	58	37.4	53	34.2	44	28.4	155	51.7	p=0.153
7 and more times	25	25	33	33	42	42	100	33.3	

In all groups, especially in the transition phase, the level of coping with birth pain was higher in the group receiving spousal support (p<0.01). There is a statistically significant difference between the other groups (Table 2).

In the group receiving spouse support at birth, the delivery time was shortened significantly compared to the other two groups (p=0.00) (Table 3).

Birth satisfaction was higher in the spouse support group than in the mother/friend and clinical routine care groups (p<0.00). There is a statistically significant difference between the other groups. No significant difference was found between interventions (emergency cesarean section, induction, use of forceps, use of vacuum, application of amniotomy) to the participants (p>0.05).

TABLE 2: Comparison of participants in terms of anxiety and pain and coping levels (n=300).

Anxiety level	Spouse support	Mother/Friend support	Routine clinical care	
	X̄±SD	X̄±SD	X̄±SD	
Anxiety at first arrival (4-5 cm)	8.51±0.64	8.38±0.51	8.44±0.88	F=278.816 p=0.100
Anxiety in the transition phase (8-10 cm)	7.08±0.88	8.74±0.65	8.72±0.65	F=167.677 p=0.00
Level of coping with birth pain	Spouse	Mother/Friend	Routine clinical care	
On the first arrival (4-5 cm)	6.55±1.27	6.29±1.41	6.18±1.39	F=1.963 p=0.142
During the transition phase (8-10 cm)	2.95±1.01	2.00±0.68	1.83±0.57	F=60.493 p=0.000

SD: Standard deviation.

TABLE 3: Comparison of participants in terms of birth times (n=300).

Birth times	Spouse support	Mother/Friend support	Routine clinical care	
	X̄±SD	X̄±SD	X̄±SD	
5 cm-8 cm duration (minutes)	158.68±17.81	177.46±19.31	174.89±20.17	F=28.361 p=0.000
8 cm-10 cm duration (minutes)	114.08±14.36*	129.17±11.65	123.11±12.05	F=35.522 p=0.000
Second phase duration (minutes)	66.22±12.53*	90.06±9.67	89.02±10.64	F=149.696 p=0.000

SD: Standard deviation.

DISCUSSION

Anxiety during labor leads to an endogenous release of catecholamines, which lowers uterine contractility and decreases placental blood flow. Therefore, anxiety management is very important at birth. In this study, spouse support was found to be effective on reducing anxiety. In parallel with this study, the positive effect of the spouse on anxiety was studied by Güngör and Beji and Fisher et al.[5,6] The influence of the partner on anxiety may depend on the feeling of love and trust. In this study, midwifery care in routine clinical care did not have a significant effect on anxiety. Contrary to this finding, the support provided by the midwife has been found to reduce anxiety.[7,8] However, in there are studies that determine that people who gave support at birth has no effect on anxiety. Indeed, Handelzalts et al. (2012) it was determined that the person who supported the reduction of anxiety did not make any difference.[9,10]

In this study, it was determined that coping with labor pain was more effective in the group who received spousal support during the transition phase. In line with this finding, Güngör and Beji (2007) and Fisher et al. made parallel determinations.[7,8] The spouse's presence with the woman may have made it easier to cope with the pain by making him feel safe and calm. Contrary to these studies, there are many studies that determine that midwifery care is more effective in dealing with pain.[10-13] The effectiveness of midwifery support in pain management can be associated with women's expectations.

As the labor time increases, the intervention rate increases. Every attempt made takes the birth away from its natural course.[14,15] In addition, the shortening of the acceptable labor time leads to psychological comfort for the woman and makes him feel better.[16-19] In this study, the first stage of birth was completed in approximately 15 minutes and the second stage in 19 minutes shorter time in the group who received spousal support. In the studies carried out by Fisher et al. and Karaman, similarly were found that spouse support shorten the labor times.[9,18] From the data obtained in our study, it is thought that the support of the spouse

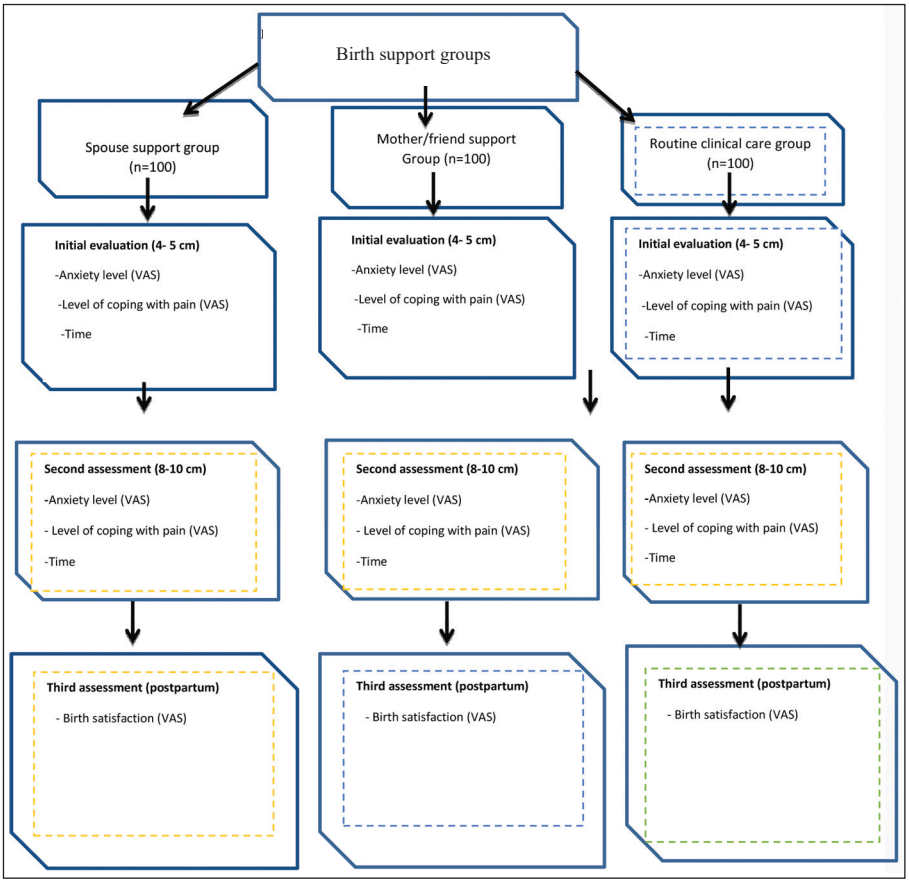

FIGURE 1: Participants are divided into 3 groups according to the people they want to be there for support. First group is spouse support, second group is mother/friend support and third group is women who want routine clinical care.

during childbirth makes the woman feel safe, calms and relaxes the pregnant woman, and increases the release of oxytocin by preserving its natural course, ensures regular contractions and shortens the labor period.

CONCLUSION

It was determined that there was a statistically significant difference between the groups in the rates of feeling supported during childbirth and positive evaluation of labor, and the difference was due to the women in the group receiving spousal support. It may not be sufficient for women who have given birth only to receive routine clinical care. As determined in this study, spousal or mother/friend support can be provided in addition to routine care.

Source of Finance

During this study, no financial or spiritual support was received neither from any pharmaceutical company that has a direct connection with the research subject, nor from a company that provides or produces medical instruments and materials which may negatively affect the evaluation process of this study.

Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

Idea/Concept: *Sümeyye Tokat Çınaroğlu, Meltem Demirgöz Bal;* ***Design:*** *Sümeyye Tokat Çınaroğlu, Meltem Demirgöz Bal;* ***Control/Supervision:*** *Sümeyye Tokat Çınaroğlu, Meltem Demirgöz Bal;* ***Data Collection and/or Processing:*** *Sümeyye Tokat Çınaroğlu, Meltem Demirgöz Bal;* ***Analysis and/or Interpretation:*** *Sümeyye Tokat Çınaroğlu, Meltem Demirgöz Bal;* ***Literature Review:*** *Sümeyye Tokat Çınaroğlu, Meltem Demirgöz Bal;* ***Writing the Article:*** *Sümeyye Tokat Çınaroğlu;* ***Critical Review:*** *Sümeyye Tokat Çınaroğlu, Meltem Demirgöz Bal;* ***References and Fundings:*** *Sümeyye Tokat Çınaroğlu, Meltem Demirgöz Bal;* ***Materials:*** *Sümeyye Tokat Çınaroğlu, Meltem Demirgöz Bal.*

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