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ORIGINAL ARTICLE

Two are better than one? The impact of lay birth companions on childbirth experiences and PTSD

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Abstract

Although continuous support during childbirth is recommended by the World Health Organization (WHO) and has well-established benefits, the practice is still not routinely implemented in all maternity settings. We studied the possible effect of an additional lay companion (other than the partner) on childbirth experience and postpartum post-traumatic stress disorder (PTSD). Two hundred and forty-six women, who gave birth in maternity wards of a large tertiary health center in Israel, responded to questionnaires in person at 1–4 days (Demographic questions and the childbirth experience questionnaire) and on-line at 8–10 weeks postpartum (City Birth Trauma Scale). Obstetric data were taken from the medical files. Women who were accompanied by their partners and an additional companion were lower in birth-related PTSD symptoms (M = 1.17, SD = 2.61) than women accompanied by only their partner (M = 1.53, SD = 2.79) ($F(2, 240) = 4.0$, $p < 0.05$). Women who had a single companion (M = 1.44, SD = 2.61) showed more birth-related PTSD symptoms than women who had two or more companions (M = 1.17, SD = 2.52) ($F(1, 241) = 6.4$, $p < 0.05$). In addition, women who had a single companion were higher in general PTSD symptoms (M = 3.91, SD = 4.73) than women who had two or more companions (M = 2.31, SD = 4.29) ($F(1, 241) = 4.2$, $p < 0.05$). No differences were found in childbirth experiences of women with single or multiple companions. Allowing more than one lay companion (other than the partner) may be a simple cost-effective way of providing beneficial support in all birth settings, promoting respectful maternity care and reducing childbirth-related PTSD levels and by that future psychopathology sequela.

Keywords Lay companion · Childbirth · Postpartum, PTSD · Birth experience

Introduction

Throughout history, birthing women have been attended by lay companions during childbirth. Modern developments and the move to a medical model of birth changed that in many countries (Bohern et al. 2019). Nevertheless, having a lay companion, such as a family member and/or hospital professionals, present continuously while supporting pregnant women during labor has been shown to improve outcomes for both women and infants (Bohern et al. 2017). Continuous support by companion of choice is therefore recommended by the WHO in their intrapartum care guidelines (WHO 2018).

However, despite the known benefits, this practice is still not routinely implemented in all maternity settings (Lunda et al. 2018). Countries vary in whether it is possible for lay companions to be present in the labor and birth room (Bakhta and Lee 2010; Khresheh 2010; Vasilevski et al. 2021; Wang et al. 2018), but in many of them, women want their partner or other lay companion with them during labor for support (e.g., Fathi Najafi et al. 2017; Wanyenze et al. 2022). In a systematic qualitative review of 35 studies in 19 countries, it was found that among the things that mattered to most women was practical and emotional support from birth companions (Downe et al. 2018). However, in other

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countries, views may be different. For example, in Nigeria and Russia women preferred their partner not to be present during birth (Adeyemi et al. 2018; Baktha and Lee 2010; Oboro et al. 2011). Thus, the issue of lay companionship's support during childbirth may be influenced by the context of specific countries and cultures. The issue was further complicated under COVID-19 restrictions that limited or forbade the presence of companions (Kathuria et al. 2020; Thomson et al. 2022).

There is very little research looking at whether the identity of childbirth lay companion (e.g., partner, other relative) impacts on women's experiences during childbirth. Most of the studies regarding family members' attendance at birth are about partners, presumably because in Western countries, expectant fathers are encouraged to be involved and actively participate in their partner's delivery (Johansson et al. 2015). To our knowledge, this is the first attempt to study the possible different effects of having a partner and/or other companion as well as the number of lay companions present in the labor and birth room.

This study was done in Israel, in a medicalized birthing context where almost all births (more than 99%) take place in hospitals (Benyamini et al. 2017). Health regulations in all medical facilities in Israel permit for at least one lay companion during childbirth, while most facilities allow for two or more companions (as in the facility where this research was done) and most women are accompanied by their partners. During labor, the Israeli parturient is accompanied by professional midwives. In all cases, a trained and board-certified obstetrician is supervising the labor. After labor, if needed, trained nurses, as well as a social worker lactation consultant, are available for all parturients.

In this secondary analysis of data from a longitudinal study, we chose to study the possible effect of an additional lay companion (other than the partner) on childbirth experience and postpartum PTSD, hypothesizing that more companions and the presence of companions other than the partner will be associated with better birth-experiences as measured shortly after birth and lower postpartum PTSD symptoms as measured 2 months postpartum. This study was performed pre-pandemic, as during the pandemic, hospitals restricted birth companions to only one.

Methods

Participants

Women who gave birth in maternity wards of a large tertiary hospital responded to questionnaires at 1–4 days (T1) and 8–10 weeks postpartum (T2). Inclusion criteria were that women gave birth to a live baby at 37 + weeks' gestation and had a singleton pregnancy. Exclusion criteria was if the woman could not speak Hebrew fluently enough to take part.

Procedure

The study was part of a larger longitudinal study preformed at the Rabin Medical Center, a tertiary university-affiliated hospital in the central region of Israel run by the largest national health management organization in Israel, Clalit Health Services (for a detailed description see Handelzalts et al. 2021). Ethical approval was obtained from the Rabin Medical Center and the Academic College of Tel-Aviv Yaffo Institutional Review Boards. Data analyzed in this study were collected in person for T1) 1–4 days postpartum) between July 2018 and May 2019. Research assistants approached all women on the maternity ward on a random day of the week. After obtaining informed consent, obstetric data were taken from the medical files, and women completed on paper the study questionnaires (Demographic questions and the childbirth experience Questionnaire (CEQ)). Between September 2018 and July 2019, at T2 (8–10 weeks postpartum), participants completed the City Birth Trauma Scale (BiTS) using online link. Participants received the online invitation 8 weeks postpartum, and the link was open until 10 weeks postpartum. Questionnaires and data output were generated using Qualtrics© 2019 (Qualtrics, Provo, UT; http://www.qualtrics.com).

Measures

Sociodemographic questionnaires included age, education, income, religious affiliation, country of origin, marital status, and number of children.

Obstetric data included self-report questions such as number of previous births, additional pregnancy since the study began, past abortions or miscarriage, fertility treatments, and pregnancy risks. Data extracted from medical records included type of birth, episiotomy and/or perineal tears, duration of stage 2, gestational age, and administration of epidural and/or oxytocin.

Companions during childbirth—women were asked an open question about the identity of their birth companions. Data were coded for partner, mother, mother-in-law, sister, friend, doula, other female relatives, and/or another male relative. Data were grouped either in relation to identity of companion (partner only, partner and another companion, and a companion that is not the partner) or number of companions (single companion or two or more companions).

City Birth Trauma scale (BiTS) consists of 31 items and developed based on DSM-5 criteria for PTSD to measure postpartum PTSD (Ayers et al. 2018). Twenty-three of the items assess frequency of symptoms over the last week, scored on a scale ranging from 0 ("not at all") to 3 ("5 or

more times") and cover the four symptom clusters of DSM-5: "re-experiencing," "avoidance," "negative mood and cognitions," and "hyperarousal." For this analysis, we used the BiTS two symptom factors: birth-related symptoms (covering symptoms of intrusions, avoidance, and two items from Negative cognitions and mood specifically related to birth) (9 items; range 0–27) and general symptoms (covering other items from negative cognitions and mood and hyperarousal) (11 items; range 0–33). These factors were identified in factor analysis in the study of the original scale (Ayers et al. 2018) and in various translations (Handelzalts et al. 2018; Nakic Radoš et al. 2020). In the current study, internal reliability was good ($\alpha = 0.88$ for general symptoms and $\alpha = 0.71$ for birth-related symptoms). The City BiTS was administrated at T2 (8–10 weeks postpartum).

Childbirth Experience Questionnaire (CEQ) is a self-administered questionnaire assessing the mother's childbirth experience (Dencker et al. 2010). Four factors of birth experience satisfaction are evaluated: one's own capacity, professional support, perceived safety, and participation. The scale comprises 22 items: 19 items presented on a 1 (*totally disagree*)–4 *(totally agree*) Likert-type scale and three items assessed on a visual analog scale (VAS) transformed to 1–4 scale. For this study, the total score was used. Internal consistency for the scale was $\alpha = 0.92$.

Statistical analysis

Data were described by means and standard deviations or by counts and percentages, as appropriate. Correlations between the study variables were estimated using the Pearson correlation coefficient. Groups were compared in their demographic characteristics using a one-way ANOVA model for numeric measures and the Chi-Square test or Fisher's exact test for count data. Differences in PTSD subscales were tested using a one-way MANCOVA model, while differences in childbirth experiences were tested using one-way ANOVA.

Covariates that were initially included in the analyses were chosen according to the correlations with the companion's groups and outcome variables in the current study (see Tables 1–3) or based upon previous research (Ayers et al. 2016; Dekel et al. 2017; McKelvin et al. 2021): age, education, income, marriage, previous psychiatric diagnosis, parity, mode of birth, second-stage duration, and Oxytocin administration. Covariates that were not significant in these analyses were excluded from the final model. Thus, the final models presented here only control for primiparity, having a psychiatric diagnosis and second-stage labor duration that were significant.

Regarding attrition, 1157 women were approached initially, of which 882 (76.23%) consented and were eligible for inclusion. Of these, 608 women (68.93% of the women who were eligible and consented) had full set of data for research variables at T1 and 246 (27.89% of the who were eligible and consented) had full data for research variables at T2. Our T1 sample comprised of 608 women. Of these, 14 were excluded as they were accompanied by a professional doula, as well as 37 women who went through childbirth unaccompanied by lay companions. Thus, the final sample at T1 included 557 women who completed the CEQ questionnaire and at T2 284 participants which provided data regarding the BiTS questionnaire. Of them, 246 women provided full data regarding the covariates and were included in the final model and so comprised the final sample for this study. Power analysis, done using G*Power v 3.1.9.4, guarantees over 97% power for the main statistical analyses conducted at 5% significance level.

Results

Two hundred forty-six women (ages 20–43, $M = 31.4$, $SD = 4.6$) were included in the final analysis. Sixty-four women (26%) were primiparous, 233 (95%) were married, 225 were (92%) Jewish, 173 (70%) had higher education (college and above), and 102 (41%) had above-average income. For other demographic and correlations with the outcome measures data, see Table 1. Further, BiTS birth-related and general symptoms were correlated ($r = 0.48$, $p < 0.01$), while only BiTS birth-related symptoms were negatively correlated with the birth experience (CEQ, $r = -0.18$, $p < 0.01$).

The effect of support during birth was tested in two ways by grouping the participants by the identity of the companions and by number of companions. Concerning identity, as most women were accompanied by their partner (92%), we created three groups: partner only ($N = 124$), partner and another companion ($N = 101$), and a companion that is not the partner ($N = 21$). When companions were not the partner, they were all females. Regarding number of companions, as only a small number of women had more than two companions, they were grouped together, thus creating two groups: a single companion ($N = 143$) or two or more companions ($N = 103$). Group comparisons of background variables by the identity of the companions is presented in Table 2 and by the number of companions—in Table 3.

Identity of the companions—a MANCOVA analysis (controlling for being primiparous, psychiatric diagnosis and second stage duration) showed significant differences between these groups on the multivariate BiTS measure ($F(4, 480) = 2.5$, $p = 0.044$). Univariate analysis, presented in Table 4, showed significant differences in the birth-related PTSD symptoms, however, with a small effect size. Bonferroni post hoc analysis showed that women who were accompanied by their partners exhibited higher birth-related symptoms than women who were accompanied by their partners and an additional companion. Women who were accompanied by other companions did not significantly differ from either group, yet it should be noted that the small size of this

Table 1 Sample demographics and Pearson correlations (r_p) with each of the outcome variables ($n = 228–246$ because of missing or unknown data)

Measure	M (SD)	N (%)	r_p with CEQ	r_p with BiTS general symptoms	r_p with BiTS birth related symptoms
Age	31.4 (4.6)		−.03	−.03	−.04
Higher education			.02	−.03	−.03
No (0)		73 (30)			
Yes (1)		173 (70)			
Average or above income			−.06	−.12	−.09
No (0)		147 (57)			
Yes (1)		102 (41)			
Unknown		4 (2)			
Religion			.05	.08	−.03
Jewish		225 (91)			
Other		19 (8)			
Unknown		2 (1)			
Married			−.03	−.17**	−.01
No (0)		13 (5)			
Yes (1)		233 (95)			
Psychiatric diagnosis			−.03	.27*	.14**
No (0)		239 (94)			
Yes (1)		7 (3)			
Primiparous			−.06	.16*	.25**
No (0)		182 (74)			
Yes (1)		64 (26)			
Second-stage duration	0.69 (1.04)		.04	.10	.34**
Birth type					
Vaginal		215 (87)			
Elective CS		6 (2)			
Emergency CS		9 (4)			
Instrumental		16 (6)			
Gestational age	39.4 (1.2)		.04	−.01	.01
Companion identity [a]					
Partner		225 (92)			
Mother		90 (37)			
Sister		21 (9)			
Mother-in-law		10 (4)			
Female friend		7 (3)			
Other female		10 (4)			
Other male		0 (0)			
Number of companions					
1		143 (58.1)			
2		90 (37.6)			
3		12 (4.9)			
4		1 (0.4)			
Oxytocin			−.07	−.09	−.13*
No (0)		106 (43)			
Yes (1)		124 (50)			
Unknown		16 (7)			
Episiotomy/lacerations			−.10	.01	.10
No (0)		81 (33)			
Yes (1)		147 (60)			
Unknown		18 (7)			

Table 1 (continued)

Measure	M (SD)	N (%)	r_p with CEQ	r_p with BiTS general symptoms	r_p with BiTS birth related symptoms
Epidural			−.01	−.01	−.03
No (0)		77 (31)			
Yes (1)		157 (64)			
Unknown		12 (5)			
Fertility treatments			−.03	.06	.08
No (0)		219 (89)			
Yes (1)		27 (11)			
Previous pregnancy loss			.08	−.02	.02
No (0)		148 (60)			
Yes (1)		85 (35)			
Unknown		13 (5)			

[a] Total percent exceeds 100% as some women were accompanied by more than one companion. "Unknown" categories were not included in the analysis. Results of the ANOVA with CEQ as outcome did not differ when repeated with the smaller sample of women who responded to the questionnaire at T2. Therefore, descriptive statistics are presented for the T2 sample as it comprises the sample for both research questions (regarding birth experience and childbirth PTSD). All dummy variables were coded as follows: "0" for No and "1" for Yes; correlations' directions should be interpreted accordingly $*p < 0.05$, $**p < 0.01$

Table 2 Group comparisons in socio-demographic variables by companion identity. Measures are described as M(SD) or n/N(%). $N = 228–246$ because of missing or unknown data

Measure	Partner only	Partner and another companion	Another companion only	F/χ^2	p
Age	32.25 (4.46)	30.43 (4.4)	31 (5.28)	4.5	0.012
Primiparity	17/124 (13.7)	41/101 (40.6)	6/21 (28.6)	21.0	< 0.001
Fertility treatments	12/124 (9.6)	11/101 (10.8)	4/21 (19)	1.6	0.446
Previous pregnancy loss	41/121 (33.8)	38/93 (40.8)	6/19 (31.6)	1.3	0.517
Psychiatric diagnosis	5/124 (4)	1/101 (1)	1/21 (4.7)	FET	0.264
Birth type				FET	0.661
Vaginal	108/124	89/101	18/21		
Elective CS	4/124	2/101	0/21		
Emergency CS	6/124	3/101	0/21		
Instrumental	6/124	7/101	3/21		
Epidural	72/116(62)	71/97 (73)	14/21 (67)	3.0	0.227
Oxytocin	57/115 (49.6)	55/95 (57.9)	12/20 (60)	1.8	0.411
Episiotomy/lacerations	64/112 (57.2)	67/95 (70.6)	16/21 (76.2)	5.4	0.067
Married	122/124 (98.4)	98/101 (97)	13/21 (62)	49.6	< 0.001
Jewish	115/122 (94.2)	93/101 (92.1)	17/21 (81)	4.4	0.109
Higher education	93/124 (75)	72/101 (71.3)	8/21 (38.1)	11.8	0.003
Average or above income	61/123 (49.6)	38/100 (38)	2/20 (10)	12.3	0.002
Gestational age	39.35 (1.16)	39.57 (1.11)	39.79 (1.14)	1.8	0.164
2nd stage labor duration	0.49 (0.82)	0.87 (1.23)	0.97 (1.01)	4.8	0.009

FET = Fisher's exact test

group may account for that. No differences between groups were found in birth experiences, as measured by the CEQ.

Number of companions—a MANCOVA analysis showed a significant global effect ($F(2, 240) = 3.7$, $p = 0.025$). Univariate analysis, presented in Table 5, showed significant differences in the both Birth-related and general BiTS symptoms, such that women who had a single companion showed more birth-related and general symptoms than women who had two or more companions, however, with a small effect size. No differences between groups were found in CEQ.

Table 3 Group comparisons in socio-demographic variables by the number of companions. Measures are described as M(SD) or n/N(%). $N = 228–246$ because of missing or unknown data

Measure	Single companion	Multiple companions	F/χ^2	*p*
Age	32 (4.4)	30.4 (4.6)	6.7	0.010
Primiparity	21/143 (14.7)	43/103 (41.7)	22.8	< 0.001
Fertility treatments	14/143 (9.8)	27/246 (11)	0.5	0.483
Past pregnancy loss	44/139 (31.7)	41/94 (43.6)	3.5	0.063
Psychiatric diagnosis	6/143 (4.2)	1/103 (1)	FET	0.244
Birth type			FET	0.664
Vaginal	125/143 (87.4)	90/103 (87.4)		
Elective CS	4/143 (2.8)	2/103 1.9)		
Emergency CS	6/143 (4.2)	3/103 (2.9)		
Instrumental	8/143 (5.6)	8/103 (7.8)		
Epidural	82/135 (60.7)	75/99 (75.8)	5.8	0.016
Oxytocin	68/133 (48.9)	41/97 (42.3)	1.0	0.321
Episiotomy/lacerations	79/131 (60.3)	68/97 (70.1)	2.3	0.126
Married	137/143 (95.8)	96/103 (93.2)	0.8	0.368
Jewish	130/141 (92.2)	95/103 (92.2)	0.0	0.992
Higher education	103/143 (72)	70/103 (68)	0.5	0.491
Average or above income	66/140 (47.1)	35 (102) 34.3	4.0	0.046
Gestational age	39.41 (1.16)	39.57 (1.12)	1.3	0.260
2nd stage labor duration	0.53 (0.84)	0.91 (1.23)	8.4	0.004

FET = Fisher's exact test

Table 4 Companion identity, mean PTSD symptom, and childbirth experience scores

	Partner only ($N = 124$) M (SD)	Partner and other ($N = 101$) M (SD)	Other only ($N = 21$) M (SD)	F	Partial η^2
Birth-related PTSD symptoms	1.53 (2.79)	1.17 (2.61)	0.99 (1.35)	4.0*	0.032
General PTSD symptoms	2.97 (4.73)	2.42 (4.4)	3.63 (4.95)	1.2	0.010
Childbirth experience	66 (13.2)	63.8 (13.2)	68.2 (11)	0.7	0.006

The results are of two separate analyses, MANCOVA for the BiTS subscales, controlling for being primiparous, having a psychiatric diagnosis and second-stage labor duration, and ANOVA for CEQ. *df* are (2, 240) for BiTS and (2, 243) for CEQ * $p < 0.05$

Table 5 Number of companions, mean PTSD symptom and childbirth experience scores

	Single companion ($N = 143$) Mean (SD)	Two companions or more ($N = 103$) Mean (SD)	F	Partial η^2
Birth-related PTSD symptoms	1.44 (2.61)	1.17 (2.52)	6.4*	0.026
General PTSD symptoms	3.19 (4.73)	2.31 (4.29)	4.2*	0.017
Childbirth experience	66 (13.2)	63.8 (13.2)	0.1	< 0.001

The results are of two separate analyses, MANCOVA for the BiTS subscales, controlling for being primiparous, having a psychiatric diagnosis and second stage labor duration, and ANOVA for CEQ. *df* are (1, 241) for BiTS and (1, 244) for CEQ * $p < 0.05$

Discussion

In this study, we aimed to examine the associations between the number and identity of lay companions during birth with childbirth experiences and postpartum PTSD symptoms at 2 months postpartum. Results suggested that having two or more lay companions was associated with lower birth-related and general PTSD symptoms compared to having one companion. It is not clear if the identity of the companion is also important as our results also show that if a woman was accompanied by a female companion as well as her partner she had lower birth-related PTSD

symptoms than women accompanied by their partner only. However, women who were accompanied only by a woman companion (without a partner) did not differ from either group in PTSD symptoms though this group was relatively small ($N=21$). No associations were found for childbirth experience with any of the companion's variables.

Since most women were accompanied by their partner, and the specific lay companions' groups (other than the partner) were too small to analyze separately, we cannot determine whether this effect is due to the number of companions in general (one vs. two and above), or the combination of the partner and another female companion. What is evident is that, in this specific context, having more than one lay companion was associated with having less birth-specific PTSD symptoms. We can speculate that having two lay companions at birth means these companions can better attend to and support the birthing women's needs, especially if complications arise. For example, one companion may liaise with the midwife or the obstetrician, whilst the other stays with the woman to provide emotional support.

This is consistent with some previous evidence regarding lay companions in general to support this. A qualitative evidence synthesis of perceptions and experiences of labor companionship found that labor companions supported women by bridging communication gaps between health workers and women; as well as by being advocates in support of the woman; and providing practical and emotional support (Bohren et al. 2019). It may be suggested that having at least two lay companions mean they can attend to these needs better. Our results are also consistent with the more general association reported between support during childbirth and postpartum PTSD (Ayers et al. 2016).

We propose that the presence of companions may be particularly important in more complicated births, such as instrumental and emergency CS, that were found to be associated with postpartum PTSD (Ayers et al. 2016), where more care and attention are clearly needed. Unfortunately, due to the random nature of sampling, we had low percentages of vaginal assisted and emergency CS deliveries that prevented us from further exploring those possible interactions.

Further research is needed to study whether the lay companions' effect is linear in nature, meaning that more companions may offer better support or that the effect is for more than one lay companion, regardless of larger number. Further research is also needed to study whether the effect is associated with the identity of the companion, e.g., whether the combination of a partner (all men in this study) and a female figure is better regarding postpartum PTSD and whether there is an effect of the lay companion's gender.

Although we hypothesized that an additional lay companion and the presence of companions other than the partner would be associated with better birth-experience, we did not find such effect. This is in contradiction to previous studies of the general effect of having a lay companion vs. no companion (Bruggemann et al. 2007; Khresheh 2010). In the current study, all the women gave birth with at least one lay companion. This may have impacted their birth experience and resulted in a ceiling effect; thus no differences in birth experiences were found between number/identity of companions though more research is needed.

As stated in the introduction, desire, and policy regarding lay companionship during birth can vary across countries and cultures. This study was done in Israel where more than one companion is allowed in all hospital facilities. In addition, the dominant model of birth is medical and while uncomplicated births in hospitals are assisted by midwives, overall, labor, and birth are led by obstetricians, who make all medical decisions (Benyamini et al. 2017). In this climate, the presence of lay companions can bridge the gap between the medical and midwifery help that is given by staff, to the emotional psychological support needed by the women that may be offered by lay companions. It should be noted, however, that our results may only be generalized to other western countries with similar birthing contexts, and further research is needed in other cultures and environments.

Limitations

This study is not without limitations. First, it was a secondary analysis of a longitudinal study rather than specifically designed experiment to examine the impact of lay companions on postpartum psychopathology. Future studies should investigate this in more depth and measure the number and identity of companions, as well as women's satisfaction with this companionship. Further, as women were randomly sampled for the study, all modes of birth other than vaginal were represented by small groups (reflecting the actual percentages). Thus, we could not study the possible interactions between mode of birth and birth experience. Second, although it was a large sample for longitudinal analysis, it was not big enough for the breakdown of lay companions' identity, other than the partners compared to non-partners. Furthermore, the group that had no lay companions at all was too small to analyze (resulting in a selection bias), yet is a group of particular interest, as this is a possibly vulnerable group that should be further studied. Third, although this was not an experimental study, as we could not allocate women to the companion's group, and thus could not establish causality, we believe that the longitudinal nature, as well as the control of various covariates, strengthens our conclusions. Fourth, only 28% of the women who initially consented, completed the survey at T2. Some of this attrition happened immediately, as about 25% of the consenting women did not complete the initial questionnaire. Others

dropped-out between T1 and T2, about 8–10 weeks after childbirth. However, due to incomplete data regarding consenting women who didn't complete the survey, we don't have enough data to analyze possible factors associated with this attrition. Thus, our results may be affected by it, and women who stayed in the study may be potentially different in key aspects from women who dropped out. Lastly, as stated in the introduction, different countries and cultures allow for different numbers (and even the possibility itself) of lay companions in the delivery room. This study was done in one site representing lay companions' attendance in birth culture in Israel, a developed country.

Conclusions and implications for practice

Despite the limitations of studying a specific cultural context where at least one lay companion is present, mostly the partner, our results support the adoption of the WHO recommendations for continuous support. The presence of more than one lay companion was found to be associated with lower postpartum PTSD birth-related and general symptoms. Continuous support by lay companions may be a simple way to prevent adverse births consequences, such as postpartum PTSD, that were found to be associated with mother-infant relationship disruptions (Cook et al. 2018).

Although the presence of companions was previously shown to be associated with favorable birth consequence (Bohren et al. 2017), this is the first study suggesting there may be a longer-term psychological benefit of having two lay birth companions in reducing childbirth trauma at 2 months postpartum. Although the effect sizes of the difference between groups were small, we suggest that any reduction in postpartum PTSD following a simple change such as allowing women to have more than one companion is an important clinical message. Further, lay companions support during childbirth may be valuable, as many birth settings around the world cannot adhere to the recommendation of midwifery one-to-one support (Sosa et al. 2018). This may be especially important in pandemic times, where the presence of lay companions has been limited, though their presence may be needed more than ever when there is shortage of staff (Kathuria et al. 2020). This is a simple cost-effective way of providing beneficial support in all birth settings, promoting respectful maternity care (Singh et al. 2021) and, by that, preventing future psychopathology sequela.

Declarations

Conflict of Interest The authors declare no competing interests.

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