Journal of Reproductive and Infant Psychology
Vol. 29, No. 3, July 2011, 262–275

Routledge
Taylor & Francis Group

Women and men's psychological adjustment after abortion: a six months prospective pilot study

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(*Received 31 August 2010; final version received 10 May 2011*)

Background: The psychological impact of abortion is a controversial issue. While some studies indicate that women who had elective abortions present lower psychological distress when compared with those who had spontaneous or therapeutic abortions, other studies found abortion to be associated with significant psychological distress. **Objectives:** To assess psychological adjustment (emotional disorder, trauma symptoms and couple relationship) one and six months after abortion, and gender differences regarding psychological adjustment, and to assess the moderation role of couple relationship in the effect of the etiology of abortion on emotional disorder and trauma symptoms. **Methods:** Women (n=50) with different etiologies of abortion agreed to participate, as well as 15 partners (N=65). Assessments took place one and six months after abortion. Measures included the Brief Symptoms Inventory, the Impact of Event Scale-Revised and the Relationship Questionnaire. **Results:** A decrease in emotional disorder for all etiologies of abortion and an increase in perceived quality of couple relationship in therapeutic abortion were observed over time. Couple relationship moderates the effect of the etiology of abortion on trauma symptoms one month after abortion. **Conclusion:** Psychological adjustment after abortion seems not to be exclusively related to its etiology, being influenced by other factors such as couple relationship.

Keywords: etiology of abortion; emotional disorder; trauma symptoms; couple relationship

Abortion concerns pregnancy interruption before fetal viability. Literature defines abortion as any pregnancy interruption before the 24th week of gestation (Llewellyn-Jones, 2001). The psychological impact of abortion may differ according to its etiology (spontaneous, elective or therapeutic). Also, the literature concerning the psychological impact of abortion in women and men includes data regarding its etiology.

It is known that 20% of all pregnancies end in spontaneous abortion. Thus it is important to identify the emotional consequences of this experience, since severe psychological distress may result (Warsop, Ismail, & Iliffe, 2004).

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ISSN 0264-6838 print/ISSN 1469-672X online
© 2011 Society for Reproductive and Infant Psychology
DOI: 10.1080/02646838.2011.592974
http://www.tandfonline.com

Spontaneous abortion can be interpreted as a major event in women's lives, given its impact in the re-evaluation of past and future experiences (Maker & Odgen, 2003). Women may also be affected in their beliefs about fertility (Gerber-Epstein, Leichtentritt, & Benyamini, 2009).

Sadness is frequently identified as a consequence of spontaneous abortion, but trauma associated with the event is often neglected (Lee & Slade, 1996). Some authors consider that studies should focus on the spontaneous abortion experience as a whole, attending particularly to the resulting trauma (Lee & Slade, 1996; Morrissey, 2007). Early detection of trauma related symptoms may foster emotional adjustment and prevent negative emotional responses over time.

Klock, Chang, Hiley and Hill (1997) found that women who have a spontaneous abortion after an elective abortion make different attributions to the loss. The course of women's psychological responses differs in the period of five years following the abortion, when comparing spontaneous and elective abortion (Broen, Moum, Bödtker, & Ekeberg, 2005).

Shortly after the event, emotions inherent to a spontaneous abortion are more intense than the emotions regarding an elective abortion. However, over time, women who have suffered elective abortions show higher levels of avoidant thoughts and feelings when compared to those who had a spontaneous abortion (Broen, Moum, Bodtker, & Ekeberg, 2004).

Inconsistent data regarding the psychological impact of elective abortion are found in the literature. Even though most studies indicate the absence of significant repercussions (e.g., Noya & Leal, 1998; Major, Cozzarelli, Cooper, & Zubeck, 2000), others point out the increased incidence of emotional disorder (Bradshaw & Slade, 2003) and increased risk for mental health problems, especially in women under the age of 21 (Fergusson, Horwood, & Ridder, 2006), who are likely to seek psychological counselling after the abortion (Coleman, 2006).

Depression diminishes and self-esteem increases, when comparing the pre- and post-elective abortion periods (Major et al., 2000). Given this fact, authors consider that most women do not show psychological problems or regret two years after the procedure. Likewise, Rees and Sabia (2007) indicate that women who had an abortion are not at greater risk for major depression than those who gave birth. These data corroborate the findings from most studies about elective abortion, over the past two decades, revealing that this event does not result in psychological disorder by itself (Noya & Leal, 1998). Most adult women who have an elective abortion do not experience mental health problems. Data also suggest the emergence of more positive emotions such as relief and well-being (Major et al., 2009).

On the other hand, other studies indicate that 40–45% of women experience high levels of anxiety between the diagnosis of pregnancy and the moment when they have an elective pregnancy interruption. Also, 20% of women are reported to experience high levels of depression. Emotional disorder tends to decrease after abortion, but for 30% of women, emotional disorder prevails in the month following the event (Bradshaw & Slade, 2003).

Emotional distress seems to affect 50 to 60% of women who undergo elective abortion. In 30% of the cases the incidence of emotional distress in the year following the abortion is reported to be severe. There are risk factors for the occurrence of the emotional distress, namely, living alone, poor emotional support from family and friends, adverse post abortion change in the relationship with the partner and underly-

ing ambivalence or adverse attitude towards abortion (Soderberg, Janzon, & Slosberg, 1998).

Consequences of elective abortion may also be noted in substance misuse. Data indicate that the ending of an unintended pregnancy by elective abortion is associated with high rates of subsequent substance misuse (Reardon, Coleman, & Cougle, 2004, Coleman, Reardon, & Cougle, 2005).

A greater possibility of trauma associated with elective abortion has been reported, as there is a tendency for these women to become more psychologically defensive and repress their emotions (Lavin & García, 2005, Dupont, 2004). Likewise, other findings suggest that post traumatic stress reactions are associated, since abortion can increase stress and decrease coping abilities, particularly for those women who have a history of adverse childhood and prior trauma (Rue, Coleman, Rue, & Reardon, 2004). The emergence of post traumatic stress disorder as a consequence of abortion was found to be associated with inadequate pre-abortion counselling and decision disagreement (Coyle, Coleman, & Rue, 2010). Late-term elective abortion (at the 2nd and 3rd pregnancy trimesters) is most associated with trauma symptoms such as intrusive feelings, and a greater likelihood of reporting disturbing dreams, reliving the abortion and having trouble falling asleep (Coleman, Coyle, & Rue, 2010). However, Turton, Hughes, Evans and Fainmain (2001) point out that elective abortion is not a predictor for post traumatic stress disorder. Elective abortion, as well as pregnancy itself, is a personal growth promoting life-event that does not necessarily lead to psychopathology (Noya & Leal, 1998). Therefore it is very important to understand the conditions leading to elective abortion, the ways by which women respond to it (Major et al., 2009), and the resources used in their responses. Perceived social support enhances adjustment to abortion indirectly through its effects on self-efficacy (Major et al., 1990). Women who perceive high support from their family, friends and partners present high self-efficacy for coping (Major et al., 1990). On the other hand, abortion may lead to relationship problems. The study by Coleman, Rue and Coyle (2009) points out that for both men and women the experience of an abortion in a previous relationship was related to negative outcomes in the current relationship, and also that the experience of an abortion within a current relationship was associated with an increased risk of conflict in the couple.

When women undergo a therapeutic abortion, difficulties in handling emotions may arise, since these pregnancies are often planned and wished for (McCoy, 2007). Literature does not present much data about the psychological impact of this type of abortion. Nevertheless, it is known that anxiety symptoms appear to be the most frequent adverse response, and trauma represents a potential consequence (Bradshaw & Slade, 2003).

When women decide to undertake a therapeutic abortion, they usually present feelings of sadness, despair, and guilt, resulting in severe suffering (Costa, Hardy, Osis, & Faúndes, 2005). The pain and sadness that these women feel is similar to those who suffer spontaneous abortions (McCoy, 2007). Although the decision is difficult, in the month following the abortion, women are satisfied with their choice (Costa et al., 2005).

Gender differences have been pointed out considering the psychological impact of abortion, but the literature is not clear in relation to the type of abortion. While men tend to experience abortion in a more individual (Reich & Brindis, 2006) and reserved way (Naziri, 2007), women express their emotions and feel a greater need

for social support from their partners (Corbet-Owen, 2003). Men and women cope differently with loss, therefore each partner should be considered separately in their response (Murphy, 1998). While men are said to show concern, use social support and ignore the event, women are reported to be more likely to search for spiritual support, use mechanisms in order to reduce stress, think positively and search for social support in other individuals who have experienced the same kind of loss (McGreal, Evans, & Burrows, 1997).

Men whose partners experience spontaneous abortion indicate feelings of sadness, loss, and uncertainty about how to deal with the situation. Moreover, besides coping with their own feelings, they express the need to give social and emotional support to their partners, since they believe that their emotional response is more intense (Kero & Lalos, 2004).

There is relatively little information regarding men's experiences and opinions concerning elective abortion. According to Coyle (2007) different reactions are displayed by men, such as relief, sadness or pain, along with the need to support their partners. Nevertheless, studies indicate that the majority of men are satisfied with their partner's decision to have an elective abortion (Kero & Lalos, 2004).

Severe emotional distress and couple relationship changes can be brought about by spontaneous abortion. Couple relationship may be questioned during the grieving process, and different ways of expressing suffering raise barriers to communication (McGreal et al., 1997). The couple relationship also assumes an important role in elective abortion situations (Wierzbicka & Sokoloeska, 2004). Women who undertake an elective abortion and have more significant social support display more positive emotional recovery (Noya & Leal, 1998). Longitudinal studies have not shown changes in the couple relationship patterns according to the type of abortion (Bradshaw & Slade, 2003) leading to the conclusion that abortion seems not to have a direct repercussion in couple relationship. Mekosh-Rosenbaum and Lasker (1995) find that abortion does not represent a negative impact and in some situations, such as therapeutic abortion, its effect on the relationship can be positive.

As a component of support, couple relationships may trigger or buffer psychological distress inherent to abortion. Expected and received support regarding abortion may impact on the way loss is experienced by women. When women perceive their partner's support as clear and evident, the relationship is understood as positive (Corbet-Owen, 2003). Partner's accompaniment seems to have an effect on women's psychological adjustment to abortion, which is particularly positive when women have high coping resources (Cozzarelli, Karrash, Sumer, & Major, 2006).

This prospective pilot study was aimed at understanding psychological adjustment to abortion according to its etiology (spontaneous, elective or therapeutic) in women and men, over a six months period. The goals of the study are: (1) to identify the impact of the type of abortion on emotional disorder, trauma symptoms and couple relationship, one and six months after the event, (2) to assess gender differences on the impact of the type of abortion on emotional disorder, trauma symptoms and couple relationship, one and six months after abortion, and (3) to assess the moderator role of the couple relationship one month after abortion regarding the effect of the type of abortion on emotional disorder and trauma symptoms, one and six months after abortion.

Based on the review of literature, the following hypotheses were formulated: (1) the impact of abortion on emotional disorder, trauma symptoms and couple relationship, one and six months after the event, differs regarding its etiology, (2) the

impact of the etiology of abortion on emotional disorder, trauma symptoms and couple relationship, one and six months after abortion is different for women and men, and (3) the couple relationship one month after abortion has a moderation role in the effect of the etiology of abortion on emotional disorder and trauma symptoms one and six months after abortion.

Participants

From a total of 78 eligible participants, 50 women who had an abortion (64%) agreed to participate. Participation in the study involved the following inclusion criteria: (1) having had spontaneous, elective or therapeutic abortion, (2) during the previous month. Partners were invited to participate. The majority (n=25, 50%) refused to participate, 15 male partners (30%) agreed to participate and 10 female participants (20%) were not involved in a relationship at the time.

The great majority of participants had elective abortions (n=30, 60%), 10 participants (20%) had spontaneous abortions, and 10 participants (20%) had therapeutic abortions. Gestational mean age at the time of abortion was nine weeks (SD=4.61). Most of the participants were Caucasian (n=61, 94%), Catholic (n=51, 76%), married or cohabiting with partner (n=43, 66%), had 12 or more years of education (n=48, 74%), and were employed (n=47, 72%). Female participant's mean age was 31 years (SD=6.45) and male participant's mean age was 35 years (SD=6.30).

Procedures

This research was conducted according to all ethical assumptions and received previous approval from the São João Hospital Ethical Commission. Participants were randomly recruited from the out-patient and in-patient units, at the time the abortion took place. The aims and procedures of the study were explained and participants signed an informed consent form. Assessments occurred one and six months after the abortion. In both assessments socio-demographic data were collected and BSI, IES-R and RQ were administered. Sixty-five individuals, 50 women (77%) and 15 men (23%) participated in the first assessment, and 31 individuals, 24 women (77%) and 7 men (23%) took part in the second assessment.

Measures

Socio-demographic questionnaire

Socio-demographic data were collected by interview. Data were obtained regarding the individuals' age, ethnicity, religion, marital status, relationship duration, educational level and professional status.

Brief symptoms inventory (BSI)

A self-report scale comprising 53-items rated on a 5-point Likert scale, was used to assess psychopathological symptoms according to nine symptom dimensions and three global indexes (Canavarro, 2007) which represent a summary evaluation of mental health. The symptom dimensions are: somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism. The global indexes are: global severity index, which

measures overall psychological distress level, positive symptom distress index, which measures the intensity of symptoms, and positive symptom total, which indicates the number of self-reported symptoms. In the present research the positive symptom distress index was used to identify emotional disorder in women and men who experienced abortion. The cut-off value used was 1.7, as suggested by Canavarro (2007) to estimate the prevalence of emotional disorder.

Impact of event scale revised (IES-R)

This self-report scale comprising 22-items, rated on a 5-point Likert scale, which evaluates subjective distress regarding any specific event (Weiss and Marmar, 1997) was used to assess trauma symptoms. Results are presented in three subscales: intrusion, avoidance and hyperarousal. A fourth subscale concerning trauma may be computed through the sum of the subscales avoidance and hyperarousal. Portuguese authors of the scale suggest 35 as the cut-off value for the trauma subscale (Castanheira, Vieira, Glória, Afonso, & Rocha, 2007).

Relationship questionnaire (RQ)

The RQ (Figueiredo, Field, Diego, Hernandez-Reif, Deeds, & Ascencio, 2008) is a brief self-report scale comprising 12-items rated on a 4-point Likert scale, and divided into two sub-scales: the positive (eight items) and the negative sub-scale (four items). The questionnaire was designed to be completed in a short time (less than two minutes), behaviourally focused, equally relevant for women and for men, and focused on both positive and negative aspects of the relationship. Positive dimensions include a sense of support and care, as well as affection, closeness and joint interests and activities, and negative dimensions include irritability, arguments and criticisms that have been associated with undesirable outcomes. In the present research, only total scores were interpreted. Authors indicate that higher scores represent better couple relationships.

Statistical analysis

Statistical analyses were performed using SPSS 17. Reliability of results was positive, as the Cronbach's alpha value obtained was higher than .70. Multivariate analyses of variance (MANOVA) were conducted to assess psychological adjustment regarding the type of abortion one and six months after the event. Repeated measures analyses of variance were conducted in order to study the effect of the type of abortion on emotional disorder, trauma symptoms and couple relationship throughout time, as well as gender differences at this level. Emotional disorder, trauma symptoms and couple relationship were tested as the within-subject effects factor. Type of abortion and gender variables were analysed as the between-subjects factors.

The moderation role of couple relationship one month after abortion over the effect of the etiology of abortion on emotional disorder and trauma symptoms levels one and six months after abortion was evaluated through multiple linear regression analysis (enter method). However, since the etiology of abortion is a nominal variable composed by three classes, in order for it to be included in the regression analysis, it was transformed in two dummy variables (Field, 2005): etiology of abortion

dummy 1 (spontaneous abortion and others) and etiology of abortion dummy 2 (elective abortion and others).

Results

1. Psychological adjustment one and six months after abortion: emotional disorder, trauma symptoms and couple relationship

No multivariate differences were identified on the effect of the type of abortion on emotional disorder, trauma symptoms and couple relationship one month after abortion (Wilk's Lambda=.84, F(6, 100)=1.46, n.s.). No multivariate differences were found concerning the type of abortion on emotional disorder, trauma symptoms and couple relationship six months after abortion (Wilk's Lambda=.70, F(6, 38)=1.46, n.s.).

Repeated measures analyses of variance results identified a significant multivariate effect of time (Wilk's Lambda=.60, F(3, 19)=4.22, p<.05), as well as a significant multivariate effect of the interaction between time and type of abortion (Wilk's Lambda=.48, F(6, 38)=2.80, p<.05). An univariate effect of time on emotional disorder was found (F(1, 21)=7.15, p<.05), suggesting the decrease of emotional disorder across time. Other univariate effects were found, concerning the interaction between time and type of abortion on emotional disorder (F(2, 21)=3.18, p<.05) and couple relationship (F(2, 21)=5.37, p<.05). Results suggest the emotional disorder decreases over time for all types of abortion. As for couple relationship's quality, over time, results suggest the increase of the perception of quality in the events of abortion due to maternal or fetal health condition (see Table 1).

2. Psychological adjustment one and six months after abortion: gender differences on emotional disorder, trauma symptoms and couple relationship level

Results show no multivariate differences in the interaction between gender and etiology of abortion on emotional disorder, trauma symptoms and couple relationship levels, one (Wilk's Lambda=.88, F(6, 96)=.99, n.s.) and six (Wilk's Lambda= .54, F(6, 32)=1.95, n.s.) months after abortion.

The assessment of the impact of type of abortion on emotional disorder, trauma symptoms and couple relationship level in the female participants did not reveal multivariate effects one (Wilk's Lambda=.82, F(6, 70)=1.20, n.s.) and six (Wilk's Lambda=.39, F(6, 24)=2.39, n.s,) months after abortion, suggesting that the psychological impact of abortion on women does not vary according to the type of abortion.

On the group of male participants, results show no multivariate effect of type of abortion on emotional disorder, trauma symptoms and couple relationship one (Wilk's Lambda= .58, F(6, 20)=1.60, n.s.) and six (Wilk's Lambda=.21, F(6, 4) =.77, n.s.) months after abortion. These results suggest that the psychological impact of abortion on men does not vary according to the type of abortion.

ANOVA general linear model repeated measures results found no multivariate effect of time on the interaction between type of abortion and gender considering emotional disorder, trauma symptoms and couple relationship (Wilk's Lambda=.88, F(6, 32)=.34, n.s.). No multivariate effect of type of abortion over time regarding emotional disorder, trauma symptoms and couple relationship in women

Table 1. Psychological adjustment after abortion: emotional disorder, trauma symptoms and couple relationship, one and six months after.

	Spontaneous abortion		Elective abortion		Therapeutic abortion		
	MI	MII	MI	MII	MI	MII	
	n=12*M(DP)*	n=6*M(DP)*	n=29*M(DP)*	n=9*M(DP)*	n=14*M(DP)*	n=9*M(DP)*	$F(2, 21)$
Emotional disorder	1.90(.68)	1.45(.74)	1.54(.57)	1.27(.95)	1.84(.54)	1.48(.48)	3.18*
Trauma symptoms	24.25(15.87)	21.17(15.06)	15.00(12.07)	13.44(14.30)	22.93(11.85)	21.89(11.52)	.85
Couple relationship	39.33(3.68)	38.00(3.35)	36.28(6.90)	38.67(2.83)	37.50(4.86)	41.22(1.86)	5.37*

*$p<.05$.

Table 2. The moderation role of couple relationship one month after abortion regarding the effect of etiology of abortion on emotional disorder.

	Emotional disorder			
	One month after abortion		Six months after abortion	
Predictors and moderators	β	t	β	t
Type of abortion d1	.14	.09	.46	.14
Type of abortion d2	1.94	1.68	1.06	.65
Couple relationship	1.23	1.14	.70	.48
	R^2=.16		R^2=.03	
Moderation role	β	t	β	t
Type of abortion d1∗ Couple relationship	−.18	−.10	−.58	−.15
Type of abortion d2∗ Couple relationship	−2.36	−1.92	−1.19	−.71
	R^2AJ=.07, F(5, 49)=1.84		R^2AJ=.20, F(5, 21)=.14	

(Wilk's Lambda=.40, F(6, 24)=2.35, p=.06) and men (Wilk's Lambda=.12, F(6, 4) =1.25, n.s.) was found.

3. The moderation role of couple relationship one month after abortion regarding the effect of the etiology of abortion on emotional disorder and trauma symptom levels one and six months after abortion

No moderation role of couple relationship was found regarding the effect of the type of abortion on emotional disorder one (R^2AJ=.07, F(5, 49)=1.84, n.s.) and six months (R^2AJ=.20, F(5, 21)=.14, n.s.) after abortion, as presented in Table 2.

A moderation role of couple relationship in the effect of the type of abortion on trauma symptoms was found one month after the event. The regression model was significant and explained 11% of the variance (R^2AJ=.11, F(5, 49)=2.35, p<.05). The interaction effect between type of abortion dummy 1 and couple relationship was not found for trauma symptoms (β=−.73, t(5, 49)=−.42, n.s.). But the interaction effect between etiology of abortion dummy 2 and couple relationship was found for trauma symptoms (β=−2.50, t=−2.09, p<.05), suggesting the moderation role. The results seem to point out that people who undertake elective abortions and present higher levels of perceived quality in couple relationship present lower levels of trauma symptoms (see Table 3). Nevertheless, no moderation role of couple relationship was found regarding the effect of the type of abortion on trauma symptoms six months after abortion (R^2AJ=.03, F(5, 21)=.85, n.s.).

Discussion

This study's results do not fully confirm the hypothesis which proposed that the impact of abortion on emotional disorder, trauma symptoms and couple relationship differs according to its etiology, one and six months after the event. Results suggest that across time, from the first to the sixth month after abortion, the levels of

Table 3. The moderation role of couple relationship one month after abortion regarding the effect of etiology of abortion on trauma symptoms.

	Trauma symptoms			
	One month after abortion		Six months after abortion	
Predictors and moderators	β	t	β	t
Type of abortion d1	.62	.41	1.66	.53
Type of abortion d2	2.03	1.79	1.56	1.04
Couple relationship	1.44	1.35	1.49	1.12
	R^2=.19		R^2=.03	
Moderation role	β	t	β	t
Type of abortion d1∗ Couple relationship	−.73	−.42	−1.95	−.54
Type of abortion d2∗ Couple relationship	−2.50	−2.09*	−1.88	−1.21
	R^2AJ=.11, F(5, 49)=2.35*		R^2AJ=.20, F(5, 21)=.14	

*p<.05.

emotional disorder tend to decrease, regardless of etiology. These findings may be explained through some authors' points of view, who indicate that abortion is a life-event with which people may deal leading to the absence of significant repercussions (Major et al., 2000, 2009). Even though literature presents some data pointing to a high risk for mental health problems (Soderberg et al., 1998, Fergusson et al., 2006), our results do not confirm those data.

No significant impact of abortion on trauma symptoms one and six months after the event was found. This may be explained through several authors' points of view that even though psychological distress may emerge after abortion, this event does not predict post traumatic stress disorder (Turton et al., 2001). Likewise, Noya and Leal (1998) indicate that pregnancy interruption may be seen as a life-event that enables personal maturation and growth, which is inconsistent with the hypothesis of the post abortion syndrome occurrence.

We hypothesize that these inconsistent findings can be explained in part by the findings of Coleman, Coyle, and Rue (2010), who determined that trauma symptoms' incidence is greater when abortion occurs during the 2nd or 3rd pregnancy trimester. Based on these findings, our results may be explained by the fact that our participants had abortions mainly during the 1st pregnancy trimester, more specifically around the 9th week of pregnancy.

Findings on the quality of the couple relationship suggest that from the 1st to the 6th month after the occurrence of therapeutic abortion, levels tend to increase. These findings are consistent with data presented by Mekosh-Rosebaum and Lasker (1995), who indicate that abortions not only do not represent a negative impact for couple relationship, but in some situations, as in the case of therapeutic abortion, an increase on quality perception of couple relationship may occur, due to the social support provided by the partners to each other.

No gender differences emerged from the results obtained in this study. Thereby, the second hypothesis, which stated that the impact of the type of abortion on emotional disorder, trauma symptoms and couple relationship, one and six months after

abortion is different for women and men, is not confirmed. Although we may question whether women and men present similar psychological adjustment in a six-month period after abortion, we also recognize that sample size may have influenced the results. Literature is clear about gender differences regarding the psychological impact of spontaneous abortion, but little is known about the impact of elective or therapeutic abortion. It appears that no studies compare the psychological adjustment of men and women according to the type of abortion. Therefore, we emphasize the need to replicate this study with a larger sample.

Regarding the moderation role of couple relationship, the achieved results do not completely confirm this study's third hypothesis, which stated that the couple relationship one month after abortion had a moderation role in the effect of the type of abortion on emotional disorder and trauma symptoms one and six months after the abortion. The couple relationship seems to moderate the effect of the type of abortion on trauma symptoms. Results suggested that participants who had elective abortions and had higher levels of perceived quality in couple relationship presented lower trauma symptoms. Therefore, these data suggest that trauma symptoms may be buffered by positive couple relationships.

These findings suggest that social support, namely when provided by the partner (e.g., Murphy, 1998, Wierzbicka, & Sokoloeska, 2004), is a key aspect in the psychological recovery after abortion, particularly for women with high coping resources (Cozzarelli et al., 2006). In fact, literature reports that a negative perception of couple relationship is associated with greater psychological morbidity as consequence of abortion (Klock et al., 1997). Also, living alone, having poor emotional support and adverse changes in the relationship with the partner constitute risk factors for psychological distress after abortion.

This study's strengths rest on the fact that not many studies presented in literature compare samples regarding three types of abortion, spontaneous, elective and therapeutic. Also, few studies have included men and a small number have compared men and women undergoing abortion.

Given this pilot study's prospective methodology, results suggest that in the period of six months after an abortion, regardless of its etiology, emotional disorder and trauma symptoms tend to diminish, and that couple relationship may buffer psychological adjustment in that same period. Even though these findings need confirmation in future research, they may be very important given the fact that elective and therapeutic abortion are very common medical procedures, and spontaneous abortion is a very usual happening.

Limitations

The major limitation of this research concerns the number of participants, namely the number of male participants. Although there was a significant decrease in the number of participants from the first to the second assessment, no significant differences were found between the group of participants that participated in both assessments and the group of participants that did not complete the second assessment. Results indicate that in the first month after abortion those who did not participate in the six months assessment were not more distressed (i.e. did not present higher levels of emotional disorders or trauma symptoms). Nevertheless, these participants

who did not complete the second assessment could be, at that point in time, more distressed by their experience.

Moreover, we lack information whether the people who consented to the study were those who had a better psychological adjustment to abortion while those who refused to participate might be the ones with greater psychological morbidity concerning the event.

Also, being a pilot study, its limitations imply the need for replication in the future, in order to confirm the results obtained. There is also the need, in future studies, to control the variables known to influence the post-abortion psychological adjustment, such as pregnancy planning, reproductive history (e.g., parity, previous abortions, and family planning attendance), previous mental health disorder, pre-abortion counselling type and decision towards abortion, which in this case could not be considered given the sample size.

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