DEATH STUDIES
https://doi.org/10.1080/07481187.2019.1679911

Events surrounding stillbirth and their effect on symptoms of depression among mothers

Patti-Rae Arocha and Lillian M. Range

Department of Counseling and Behavioral Sciences, University of Holy Cross, New Orleans, Louisiana, USA

ABSTRACT

Women who experience stillbirth often report anxiety, depression, and loss of self-esteem afterward, but aspects of the pregnancy, such as length of pregnancy, seeing the baby after delivery, and seeing the baby as long as they wished might be associated with symptoms of depression. So, we sent an online, detailed questionnaire about their stillbirth experience and their current depression to two Facebook child loss support groups. A total of 66 women answered anonymously through SurveyMonkey. The women delivered their babies at about seven months gestation, on average 2.5 years earlier. The women reported moderately severe depression symptoms, which was related to being single, length of time between diagnosis and delivery, seeing the baby immediately after delivery and as long as they wished and secondary infertility after the stillbirth. Although this sample may have been unique, these women report long-term negative ramifications of their experience. An implication is that the specific details surrounding their stillbirth experience in the hospital can have long-term implications for depression.

Many people consider the loss of a child to be the most unnatural of all losses through death (Arnold & Gemma, 1994). One type of loss that people often fail to consider is stillbirth. A stillbirth is the loss of a baby after 20 weeks gestation. According to the National Vital Statistics Report, an average of 24,000 pregnancies resulted in stillbirth in 2013 in the United States (MacDorman & Gregory, 2015).

Prior to the 1970s, hospitals did not allow parents of stillborn babies to contact with their baby. Although a cultural shift now allows parents to see and hold their baby, fear of the interaction, unawareness of the option, genetic testing and autopsy, and biological decomposition are just a few factors that may keep parents from spending the time they want with their baby. Previous research, as well as criticism from physicians, nurses, and grieving mothers, have contributed to changes in hospital policy and rituals concerning stillbirth and other forms of child loss. Although many hospitals have made this positive shift, there is still progress to be made (Cacciatore, Rådestad, & Frederik Frøen, 2008; Lindgren, Malm, & Rådestad, 2014).

Mothers who experienced stillbirth are more likely to report depression than mothers who experienced live birth (Hogue et al., 2015). Further, specific details about the stillbirth can make a difference. Time spent with the baby makes a long-term difference in mothers' psychological symptoms. Among 380 women who experienced stillbirth, and a control group of 379 women with live healthy births, mothers who spent less time than they wanted with their baby showed higher levels of anxiety than mothers who were satisfied with the amount of time they spent with their baby. Also, the time between diagnosis and delivery tended to increase anxiety (Rådestad, Steineck, Nordin, & Sjögren, 1996). In another study with the same sample three years post-loss, 32% of women who were not with their stillborn baby as long as they wanted showed symptoms of depression as opposed to 10% of women who had as much time as they wanted. However, women who became pregnant within 6 months of the stillbirth showed a significantly lower risk of depressive symptoms (Surkan, Rådestad, Cnattingius, Steineck, & Dickman, 2008). These results indicate that a mother who gets to spend as much time as she wants with her child after stillbirth is less likely to report short-term anxiety and long-term depression.

Interaction with the stillborn baby makes a long-term difference in mothers' psychological symptoms as well. In interviews of 23 mothers after a stillbirth, researchers identified five categories of separation

CONTACT Patti-Rae Arocha Patti-Rae_Arocha@uhcno.edu University of Holy Cross, 4123 Woodland Drive, New Orleans 70131, Louisiana, USA.
© 2019 Taylor & Francis Group, LLC

between a mother and child after a stillbirth: an unnatural feeling to leave the baby, going home empty-handed, limited, or non-existent access to the child, a theme of security/insecurity in the separation, and the (in)ability to let go. Regardless of whether mothers were first-time mothers or had other children, all felt an overwhelming sense of identity loss as a mother (Lindgren et al., 2014). Mothers having as much time as they needed with the stillborn baby as well as potentially supportive people during delivery can help ameliorate the longer-term psychological difficulties after a stillbirth.

Seeing and holding their stillborn baby makes a long-term difference in mothers' psychological symptoms as well. For example, in one study researchers got 2900+ mothers from 37 organizations to answer online questions about their stillbirth. Women who held their stillborn baby and had no subsequent pregnancies had lower anxiety symptoms as opposed to women who held their baby and had subsequent pregnancies. Seeing and holding the stillborn baby is beneficial in lowering the anxiety of the mother. Therefore researchers recommend that additional support is offered during subsequent pregnancies rather than discouraging the mother from holding the baby (Cacciatore et al., 2008). This was a large scale comprehensive survey, but it did not examine depression, which could be a long-term outcome of stillbirth.

Likewise, one study examined self-esteem after miscarriage, stillbirth, and child death (Hill, Cacciatore, Shreffler, & Pritchard, 2017). A random sample of more than 3800 women who had been pregnant answered questions about their self-esteem and their self-identity as a mother. Compared with women with living children, women with high importance of motherhood who experienced a miscarriage, stillbirth, or child loss, and had no other living children had lower self-esteem. Self-esteem and identity as a mother could relate to depression.

One study did examine depression and PTSD (Gold, Leon, Boggs, & Sen, 2016) as part of a broad, 2-year longitudinal study on physical and mental health outcomes comparing mothers of child loss and mothers with living children. This study combined stillbirth of at least 28 weeks gestation and neonatal loss in the first 28 days. Women who experienced child loss were four times more likely to be depressed and seven times more likely to have PTSD than women with no child loss. The present project focused only on stillbirth, exploring whether different aspects of the experience were associated with depression symptoms.

Method

Participants

Initially, 68 women responded. However, two reported miscarriages, so we did not use their data, leaving 66 women who experienced a stillbirth. The average age of these women at the time of their stillbirth was 29.11 (SD = 6.01). Most (44, 65%) were married when their baby was stillborn.

On how long ago, these women, on average, reported that the stillbirth was 2.5 years earlier ($M = 31.43$ months, SD = 47.37, range = 0 to 240 months). On how far along in their pregnancies, these women reported that they were 16–44 weeks ($M = 29.83$, SD = 7.64 weeks) at the time of the stillbirth. Note that five women reported fewer than 20 weeks; we included them because they self-identified their loss as stillbirth.

Materials

The Events Surrounding Stillbirth Questionnaire (Surkan et al., 2008) consisted of 26 mostly yes/no or short answer questions regarding the events during and immediately following a stillbirth. Experts designed this questionnaire to cover the circumstances before and after stillbirth.

The Patient Health Questionnaire (PHQ-9; Kroenke, Spitzer, & Williams, 2001) consisted of nine questions answered from 0 (Not at all) to 3 (Nearly every day), scored so that high scores indicate symptoms of depression. Evidence of reliability is that among 6000 patients in primary care and obstetrics-gynecology clinics, responses were internally consistent (Cronbach alphas = .89 and .86). We specified the period as "during and following your stillbirth." Evidence of validity is a strong association between the PHQ-9 results and interview observation results.

Procedure

First, we obtained approval to conduct this project from the University of Holy Cross-Institutional Review Board, the Human Subjects Protection Review Committee. Then, we gained approval from the administrators of My Baby Your Baby and Still Mothers, two support groups on Facebook for mothers of stillbirth, to post a link to the support groups requesting participation in the survey. Then, we posted a link to an online survey, through surveymonkey.com, to the support group pages. Within the post, we also included an explanation that the survey was

about the effects of stillbirth and symptoms of depression, gave participants the opportunity to ask questions, and referred them to a hotline for immediate support. Participants responded anonymously to the survey. We posted the survey to both groups on 26 September 2016 and closed on 2 October 2016. Most of the responses came within the first two days of the posting. Although participants had the opportunity to comment below the post with any questions, many participants posted comments expressing their gratitude for the research.

Results

The mean score was 16.1 (SD = 6.7) on the PHQ-9. Thus, these women who experienced stillbirth on average reported moderately severe depression symptoms during and since their stillbirth. In comparison, among 137 Sri Lankan women who experienced spontaneous abortion, most reported minimal depression symptoms on the PHQ-9 (Kulathilaka, Hanwella, & de Silva, 2016). These results indicate that the patients who lost a child earlier in the pregnancy, on average, reported fewer symptoms of depression than those mothers who experienced stillbirth.

Some surrounding circumstances of the delivery made a difference in depression. The period between finding out that their pregnancy was not viable and delivery correlated significantly with depression, $r(66) = .28$, $p = .03$. The average period was 5.26 days, but there was a great deal of variation (SD = 19.56 days). Most women (59, 89.4%) reported that they saw the baby directly after delivery, and they reported significantly fewer symptoms of depression ($M = 15.32$, SD = 6.56) compared to those who did not ($M = 22.71$, SD = 4.11), $F(1, 64) = 8.42$, $p = .005$, $\eta^2 = .12$. However, only about half of the women (39, 59.1%) reported that they got to see the baby as long as they wished, others said no (23, 34.8%), and a few (4, 6.1%) said that they did not remember. Those who said yes reported significantly fewer symptoms of depression ($M = 14.51$, SD = 6.45) than those who said no ($M = 18.17$, SD = 6.70), $F(1, 60) = 4.53$, $p = .04$, $\eta^2 = .07$. The amount of time they got to stay with the baby varied greatly, with a mean of 13.16 hr (SD = 19.97); the amount of time was not significantly associated with depression. The amount of time spent in the hospital after delivery averaged 45.67 hr (SD = 52.15. range = 2 hr to 2 weeks). Most got to hold the baby (60, 90.9%), and they were not significantly different in depression compared to those who did not ($M = 15.78$ versus 19.33, respectively, $p = .22$). Also, there was no significant difference in depression based on whether or not they kissed the baby (54, 82% did) or dressed the baby (22, 33% did).

Some details about children and subsequent pregnancy mattered. Those who reported difficulty getting pregnant after the stillbirth (39, 59.1%) reported significantly more depression ($M = 17.25$, SD = 6.78) than those who did not ($M = 13.50$, SD = 5.93), $F(1, 64) = 6.74$, $p = .01$, $\eta^2 = .095$. However, those with subsequent pregnancy (17, 27.4%) were not significantly different from those with no subsequent pregnancy. A total of 10 women (15.2%) reported that the stillbirth was their only child, 37 (56.1%) reported one other child, 13 (19.7%) reported 2 or more other children, and 6 gave other answers such as multiple stillbirths and miscarriages. These groups were not significantly different in depression.

After birth details did not matter. A few women (9, 13.6%) reported taking milk stopping medication; they were not significantly different in depression from those who did not. Some women reported that they met with too many people (13, 19.7%); they were not significantly different in depression from those who did not. Hospital stay ($M = 45.67$ hr, SD = 52.15) did not correlate significantly with depression.

Funeral practices did not make a difference in depression. There was no significant difference based on whether or not they had an obituary in the paper (20, 30.3% did), got to see the baby's body in the coffin (17, 25.8% did), got to have a funeral or their own ritual (49, 74.2% did), had the baby's body cremated (43, 65.2% did), or had a gravestone (22, 33.3% did). Remembrances did not make a difference in depression. A vast majority reported that they had a photo of the baby (61, 92.4%) and a token such as a hair clipping (62, 93.9%).

Marital status made a difference in depression, but other demographic questions did not. The people who were single reported significantly more depression than those who were married, $F(1, 64) = 5.74$, $p = .02$. Those who were single reported severe depression ($M = 18.41$); those who were married reported moderate to severe depression ($M = 14.51$). There was no significant correlation between symptoms of depression and average time since the stillbirth, how far along the women were in their pregnancy or age.

Discussion

These women, recruited from online stillbirth support groups, still reported several symptoms of depression after an average of 2.5 years since stillbirth.

In contrast, a large study of women recruited immediately after delivery, stillbirth was not associated with depression at 6-months to 3-year follow-up (Hogue et al., 2015). The present sample reported more depression than other samples and may differ from other members of online support groups.

Similar to other research, the depression was related to being single, length of time between diagnosis and delivery, seeing the baby immediately after delivery and as long as they wished (Surkan et al., 2008). Secondary infertility after the stillbirth made a difference in depression but having other children did not. The depression was unrelated to how far along they were at the time of delivery or how long they saw the baby. Even given modern improvements in medical care, these women reported serious long-term depression symptoms.

Among these women, some circumstances surrounding the pregnancy made a difference in their current depression. One circumstance was [a relatively long] period between learning that the baby was not viable and delivery. Other circumstances in the hospital also made a difference in depression, including seeing the baby directly after delivery and seeing the baby as long as they wished. Seeing the baby immediately and as long as they wished also made a difference in the Swedish sample (Rådestad et al., 2007; Surkan et al., 2008). The circumstances that did not make a difference were the amount of time spent in the hospital after delivery, amount of time that they stayed with the baby, or holding (most did), kissing (most did), or dressing the baby (most did not). Similarly, in Gold et al. (2016) study, about two-thirds of women who did not see the baby reported that they wished that they had. However, in Gold only about half who did not hold the baby wished that they had. Gold et al. (2016) had a large group, but only 36 reported that they did not hold the baby, so these numbers were minimal. Overall, present findings are consistent with experts' recommendations that seeing and holding the baby as long as they wished to help grieving mothers (Rådestad et al., 2007). Present results are consistent with data collected 25 years ago in specifying details of the hospital stay that are associated with long-term differences in depression.

In contrast, among this sample who had a stillborn baby on average 2.5 years earlier, subsequent pregnancies were not associated with depression. This result differs from the large Swedish sample, data collected in 1991, in which those who reported no subsequent pregnancies in a 3-year follow-up reported much more depression (Surkan et al., 2008). It could be that the Surkan sample came from the medical birth register in Sweden, whereas the present women were self-selected to be members of an online support group.

Other aspects of the hospital stay were also not associated with depression among these women. For example, after birth details including taking milk-stopping medication, seeing too many people, and hospital stay were not related to their depression symptoms. Funeral practices (obituary, seeing the body in the coffin, funeral, cremation, gravestone, remembrances) were unrelated to their depression symptoms. In contrast, the tokens of remembrance made a difference in the Swedish study (Rådestad et al., 1996). The possibility of tokens of remembrance may have evolved since 1991.

On demographics, consistent with other research (Cacciatore et al., 2008), single people reported significantly more depression symptoms than married people. However, the average time since the stillbirth, how far along the women were in their pregnancy (about seven months on average), or age was not associated with depression symptoms.

A limitation of our research was that all participants were members of Facebook support groups. Present participants self-identified as needing support, hence, they may not represent all women who experience a stillbirth. Supporting this premise is the high level of depression symptoms they reported. In addition, we did not ask if any participants sought out mental health therapy after their loss, which we recommend for future research.

In future research, we recommend asking women what they thought would have helped, given the benefit of hindsight. We also suggest a partnership with hospitals and counseling facilities to reach women who have had stillbirth or miscarriage. Partnership with hospitals and mental health facilities could provide a larger sample and more effective data on how the hospital and mental health clinicians and staff can care for women who have experienced a stillbirth. In agreement with earlier research, hospitals should provide mothers with as much time as desired with their baby, which could help mothers in their grieving process and potentially alleviate long-term depression symptoms. Higher depression symptoms in single women, as opposed to women who were married at the time of the stillbirth, could also indicate a need for a stronger support system through hospital staff for single mothers. We also recommend looking at the difference between depression symptoms in women experiencing a miscarriage compared to stillbirth, as well as the effects these losses have on the

fathers. Although medical science has grown significantly over the last 25 years, the rate of stillbirths in the United States is still significantly high as well as depression symptoms among these women. Therefore, it is vital that the medical professionals caring for women experiencing a stillbirth are aware of things they can do to mitigate symptoms of depression among these women.

References

Arnold, J. H., & Gemma, P. B. (1994). *A child dies: A portrait of family grief*. Philadelphia, PA: The Charles Press.

Cacciatore, J., Rådestad, I., & Frederik Frøen, J. (2008). Effects of contact with stillborn babies on maternal anxiety and depression. *Birth*, *35*(4), 313–320. doi:10.1111/j.1523-536X.2008.00258.x

Gold, K. J., Leon, I., Boggs, M. E., & Sen, A. (2016). Depression and posttraumatic stress symptoms after perinatal loss in a population-based sample. *Journal of Women's Health*, *25*(3), 263–269. doi:10.1089/jwh.2015.5284

Hill, P. W., Cacciatore, J., Shreffler, K. M., & Pritchard, K. M. (2017). The loss of self: The effects of miscarriage, stillbirth, and child death on maternal self-esteem. *Death Studies*, *41*(4), 226–235. doi:10.1080/07481187.2016.1261204

Hogue, C. J. R., Parker, C. B., Willinger, M., Temple, J. R., Bann, C. M., Silver, R. M., … Goldenberg, R. L. (2015). The association of stillbirth with depressive symptoms 6-36 months post-delivery. *Paediatric and Perinatal Epidemiology*, *29*(2), 131–143. doi:10.1111/ppe.12176

Kroenke, K., Spitzer, R. L., & Williams, J. W. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine*, *16*(9), 606–613. doi:10.1046/j.1525-1497.2001.016009606.x

Kulathilaka, S., Hanwella, R., & de Silva, V. A. (2016). Depressive disorder and grief following spontaneous abortion. *BMC Psychiatry*, *16*(1), 100. doi:10.1186/s12888-016-0812-y

Lindgren, H., Malm, M., & Rådestad, I. (2014). You don't leave your baby—Mother's experiences after a stillbirth. *Omega - Journal of Death and Dying*, *68*(4), 337–346. doi:10.2190/OM.68.4.c

MacDorman, M. F., & Gregory, E. W. (2015). *Fetal and Perinatal Mortality: United States, 2013* (National Vital Statistics Reports: From the Centers for Disease Control and Prevention). Atlanta, GA: Centers for Disease Control and Prevention.

Rådestad, I., Steineck, G., Nordin, C., & Sjögren, B. (1996). Psychological complications after stillbirth–influence of memories and immediate management: Population based study. *BMJ (Clinical Research Ed.)*, *312*(7045), 1505–1508.

Rådestad, I., Surkan, P. J., Steineck, G., Cnattingius, S., Onelov, E., & Dickman, P. W. (2007). Long-term outcomes for mothers who have or have not held their stillborn baby. *Midwifery*, *2*, 1–8. doi:10.1016/j.midw.2007.03.005

Surkan, P. J., Rådestad, I., Cnattingius, S., Steineck, G., & Dickman, P. W. (2008). Events after stillbirth in relation to maternal depressive symptoms: A brief report. *Birth: Issues in Perinatal Care*, *35*(2), 153–157. doi:10.1111/j.1523-536X.2008.00229.x