



# A Multidisciplinary, Family-Oriented Approach to Caring for Parents After Miscarriage: The Integrated Behavioral Health Model of Care

Angela R. Hiefner\* and Astrud Villareal

Family and Community Medicine, University of Texas Southwestern Medical Center, Dallas, TX, United States

## OPEN ACCESS

### Edited by:

Peiyuan Qiu,  
Sichuan University, China

### Reviewed by:

Yongsheng Tong,  
Peking University, China  
Shandeigh N. Berry,  
Saint Martin's University, United States

### \*Correspondence:

Angela R. Hiefner  
angela.hiefner@utsouthwestern.edu

### Specialty section:

This article was submitted to  
Public Mental Health,  
a section of the journal  
Frontiers in Public Health

**Received:** 15 June 2021

**Accepted:** 08 November 2021

**Published:** 30 November 2021

### Citation:

Hiefner AR and Villareal A (2021) A  
Multidisciplinary, Family-Oriented  
Approach to Caring for Parents After  
Miscarriage: The Integrated Behavioral  
Health Model of Care.  
*Front. Public Health* 9:725762.  
doi: 10.3389/fpubh.2021.725762

Miscarriage is increasingly gaining recognition, both in scientific literature and media outlets, as a loss that has significant and lasting effects on parents, though often disenfranchised and overlooked by both personal support networks and healthcare providers. For both men and women, miscarriage can usher in intense grief, despair, and difficulty coping, and for women in particular, there is evidence of increased prevalence of depression, anxiety, and post-traumatic stress. Additionally, miscarriage can contribute to decreased relationship satisfaction and increased risk of separation, all while stigma and disenfranchisement create a sense of isolation. Despite this increased need for support, research indicates that many parents experience their healthcare providers as dismissive of the significance of the loss and as primarily focusing only on the physical elements of care. Research exploring the barriers to providers engaging in more biopsychosocial-oriented care has identified time constraints, lack of resources, lack of training in addressing loss, and compassion fatigue as key areas for intervention. This paper will review the biopsychosocial elements of miscarriage and discuss a multidisciplinary, family-oriented approach that can be implemented in healthcare settings to ensure a high quality and holistic level of care for individuals, couples, and families experiencing pregnancy loss.

**Keywords:** miscarriage, pregnancy loss, perinatal loss, biopsychosocial, integrated care, family-oriented approach, multidisciplinary approach, primary care behavioral health integration

## INTRODUCTION

Miscarriage is a medical event with a complex combination of psychosocial sequelae, however research indicates that healthcare providers and clinical teams often fail to attend to the complex and sensitive nature of miscarriage (1, 2). For many parents, miscarriage is a traumatic loss, but not always recognized as such by important sources of support in their social and healthcare networks (1–4). This paper will review the biopsychosocial elements of miscarriage, discuss barriers to biopsychosocial approaches to miscarriage care, and propose a family-oriented, multidisciplinary approach that can address these barriers and provide parents with holistic, sensitive care after their loss.

## A BIOPSYCHOSOCIAL UNDERSTANDING OF MISCARRIAGE

### Biological

Miscarriage is more common than people often believe (5), occurring in about 31% of all pregnancies, though a portion of these occur prior to a woman's knowledge of her pregnancy (6, 7). In clinically diagnosed pregnancies, about 8–15% end in miscarriage (8, 9). Miscarriage, early pregnancy loss, and spontaneous abortion are all terms that are used interchangeably to describe the loss of a pregnancy during the first 20 weeks (10). Miscarriage and the resulting experience of loss are distinct from other perinatal losses, such as stillbirth, which is the death of a fetus after 20 weeks' gestation, or elective abortions that surgically or medically end a pregnancy prior to fetal viability (11).

There are several risk factors associated with miscarriage, including advanced maternal age, certain medications, maternal infections, and previous miscarriage (9). However, the majority of miscarriages do not have a known cause, and this can create additional challenges as parents attempt to understand what has happened, cope with the loss, and plan for future pregnancies (12). A large number of myths exist regarding other contributing factors for miscarriage (e.g., air travel, sexual activity, a prior elective abortion), though these have garnered no scientific evidence of increased risk of miscarriage (9, 13). Once a miscarriage has occurred, some biological factors are also associated with worse psychological outcomes, including older maternal age (14), history of infertility (15), unknown cause of the pregnancy loss (16), and recurrent miscarriages (17).

Previously, most miscarriages were managed in the hospital setting, and though these patients continue to be cared for in emergency departments and on labor and delivery floors, present-day miscarriage management now occurs more frequently in the outpatient setting with a patient's primary care physician or OB/GYN (9). There are three management strategies: (1) expectant management, in which the body manages the loss on its own, (2) medical management, in which the patient is sent home with medications to aid the miscarriage process, and (3) surgical management, in which the miscarried pregnancy is surgically removed. Choosing between these management options can be a difficult decision for patients, and provision of information, opportunity to ask questions, and assurance that this choice will not affect future fertility are important elements of care for these patients (9, 18, 19).

### Psychosocial

Though often perceived as a loss primarily impacting women (and for lesbian partners, the partner who carried the pregnancy), miscarriage impacts both partners in a relationship (20–22), and even other family members, as well (23). For both men and women, miscarriage can usher in intense grief, despair, and difficulty coping (24), and for women in particular, there is evidence of increased prevalence of depression, anxiety, and post-traumatic stress (25, 26). Positive social support, a satisfying partner relationship, and already having a child are protective factors against depression and anxiety after this loss (27).

Though grief has been shown to decrease over a 4 month period for both genders, isolation, feelings of loss, and the perception of the loss as a devastating event can persist over time (24). Many women may also place blame on themselves for the loss, experiencing significant guilt and feelings of failure as a woman or as a mother (28). Grandparents of the baby may experience grief as well, and the experience of seeing their own child grieve can add complexity to that loss (29). Siblings are an additional group that may struggle, sometimes invisibly, with miscarriage; as parents attempt to cope, siblings' questions and feelings of loss may inadvertently be overlooked (30). Each of these grief experiences can be exacerbated by the disenfranchisement of this loss.

Disenfranchisement is a key element in a biopsychosocial understanding of miscarriage. A disenfranchised loss is a loss that is "not openly acknowledged, publicly mourned, or socially supported" [(31), p. 4]. A growing body of research points to disenfranchisement as an aspect of miscarriage that impedes parents' abilities to successfully grieve and cope with their loss (2–4, 32). Though social support is a critical factor in bereavement outcomes (33), family members, friends, healthcare providers, and even society more generally often fail to understand and validate the meaning and significance of miscarriage loss. The lack of understanding about grief after miscarriage is pervasive, and likely perpetuated by the norms of silence surrounding early pregnancy and pregnancy loss (34).

Though often well-intentioned, many family members and friends make statements that minimize the loss (e.g., "You can always have another," "At least you know you can get pregnant"), resulting in bereaved parents feeling they do not have permission or space to experience and express their grief (2). Medical providers across multiple specialties (particularly OB/GYN, primary care, and emergency) regularly care for parents experiencing miscarriage, however, research indicates that bereaved parents are infrequently asked how they are coping after a miscarriage and often experience their providers as dismissive of the loss, which has been shown to increase women's distress (1, 4).

In addition to impacts on individual partners, research shows that miscarriage can also significantly impact the couple relationship. During a time when stigma and disenfranchisement can create a sense of isolation for one or both partners (3), miscarriage is also associated with decreased relationship satisfaction (35, 36) and increased risk of separation (37), further compounding the stress and difficulty coping parents may experience after their loss. Research indicates that these relational impacts result from high levels of distress (38), differing perceptions of the meaning of the loss (4), incongruences in expression of grief and desired support (36, 37), avoidance coping strategies that reduce emotional support within the relationship (35), and even different expectations between partners regarding how to react to the loss and how to grieve (4, 35). However, despite these challenges, some couples experience relationship growth after miscarriage as a result of turning toward each other for support during a difficult time, embracing both similarities and differences in their grief, and experiencing support and care from their partner (39, 40). Partners experiencing growth

after miscarriage cite availability of and quality of support as important factors enabling this growth (39). Enhancing support across both personal and healthcare networks may improve parents' abilities to cope with this difficult loss, and perhaps even contribute to reductions in the level of disenfranchisement accompanying miscarriage.

## CURRENT CHALLENGES IN MISCARRIAGE CARE

Healthcare providers are frequently a patient's first point of contact during or after miscarriage as they experience concerning symptoms, seek help, and receive a diagnosis, or as they follow up with their provider and discover their baby is no longer growing as expected. As this first point of contact, healthcare providers are a crucial first step in supporting parents as they navigate this loss. However, research has consistently documented significant gaps in the psychosocial elements of miscarriage care, including lack of empathy, treating miscarriage as routine and trivial, failing to attend to grief and loss, and lack of clarity in communication about the miscarriage and next steps (1, 4, 41–44).

A recent study by Jensen et al. (45) investigated healthcare providers' experiences, and found that these limitations in care are largely due to a lack of training in managing the psychosocial aspects of miscarriage, limited time, inadequate resources, and compassion fatigue. Additionally, many medical schools and residency programs lack a strong emphasis even in the medical management of miscarriage, beyond expectant management (46–48), which may reduce healthcare providers' abilities to engage patients in shared decision-making regarding miscarriage management, an important element of care associated with patient satisfaction (49). Though many healthcare providers would like to provide biopsychosocial-oriented care, they simply lack key resources to do so.

## A FAMILY-ORIENTED, MULTIDISCIPLINARY APPROACH TO MISCARRIAGE CARE

In light of the overwhelming amount of evidence indicating the sub-par quality of existing approaches to miscarriage care, researchers are calling for new methods of care and new interdisciplinary team members to improve care across all levels of the biopsychosocial spectrum (42, 50). Current recommendations for enhancing psychosocially-oriented, patient-centered care include: (1) attending to the emotional significance of the loss, (2) providing more information to parents regarding miscarriage management and impact on fertility, (3) engaging patients and their partners in shared decision-making, (4) implementing screening to identify needs for additional mental health support and (5) developing a referral system and resource list to connect parents with this support (1, 50–53). DiMarco et al. (54) have also recommended the implementation of educational programs to build healthcare providers' expertise in delivering this kind of supportive miscarriage care. To address these recommendations, we suggest

three key strategies for implementation of a family-oriented biopsychosocial approach to miscarriage care that can facilitate these important action items while simultaneously addressing the barriers that impede their use (e.g., time constraints, lack of resources, compassion fatigue).

### Establish a Multidisciplinary Team

The integrated behavioral health (IBH) model of clinical practice is an innovative and multidisciplinary approach to care that can address the barriers to high quality miscarriage care and enable healthcare practices to implement these care recommendations. In the IBH model, behavioral health providers (BHPs) are hired by the clinic, creating a multidisciplinary team able to address both biological and psychosocial elements of miscarriage under one roof (55). These clinicians come from a variety of professional backgrounds, including marriage and family therapy, professional counseling, clinical social work, and psychology. The care team members in these integrated clinics work side by side and within the same electronic health system to enable collaborative, team-based care (56).

To adapt to the healthcare setting, BHPs in these practices conduct appointments that range from 15 to 30 minutes, while also maintaining flexibility in order to be available for consultations with physician and nurse team members (55). During these consultations, the care team may decide to coordinate a "warm handoff" to connect a patient to a BHP. In a warm handoff, a physician introduces the patient to the BHP during the patient's medical visit, creating space for the BHP to establish rapport, as well as conduct a brief intervention and/or discuss treatment options (57). Though most frequently implemented in primary care, this model can also be adapted for other specialties that regularly care for patients experiencing miscarriage, such as emergency departments and outpatient OB/GYN clinics (58, 59).

### Develop a Miscarriage Protocol

Through this collaborative approach, the care team shares responsibility for each patient's well-being. Clinical settings using this model of practice often develop clinical protocols for specific diagnoses or conditions for which a BHP is regularly involved (55). In these types of protocols, the clinic's BHP is automatically connected with patients who meet specific criteria (e.g., diabetes diagnosis, positive depression screening, smoking cessation counseling). Miscarriage can be included in these protocols, establishing a behavioral health warm handoff as a regular part of miscarriage care in that clinic. This warm handoff can include an assessment of how the patient and their family are coping, create space for empathy and validation of the loss, offer psychoeducation regarding grief after miscarriage, and discuss what support and resources are available to them.

During the initial assessment, the BHP works collaboratively with the patient and family to discuss support needs and follow up options. Subsequent to the initial warm handoff, the BHP schedules follow up appointments based on each patient and family's treatment needs. For some patients, helpful follow up options may also include connection to pregnancy loss support groups, pastoral or spiritual support, and additional fertility

information from their medical provider (e.g., fertility treatment options, genetic counseling). In the IBH model, BHPs and medical providers work collaboratively in the treatment of each patient, communicating about clinical assessments, treatment goals, and progress.

By implementing a multidisciplinary care team and standard involvement of a BHP for all patients experiencing miscarriage, healthcare teams can improve the quality of care patients receive by increasing access to psychosocial care and reducing the amount of care burden that falls to physician team members. Though not all patients will require the same level of support, all patients will know this support is accessible to them if needed. When physicians are no longer tasked with the impossible job of caring for all elements of a patient's health in a small window of time, they may experience reduced stress levels and feel more freedom to engage with the psychosocial elements of miscarriage care knowing they have a team member with whom they can connect their patient (60). This shared-care protocol may also create more space for shared decision-making regarding the medical management of miscarriage, as well as more time for physicians to address patients' concerns about future fertility.

## Consider Family

Because miscarriage is often viewed primarily as an issue affecting mothers, other family members struggling with the loss may be overlooked. A growing literature base is identifying fathers' needs for support after miscarriage (61), and grandparents and siblings of the baby may also benefit from support as they navigate what the loss means for them (62, 63). With this type of loss often unacknowledged or misunderstood for mothers, other family members' grief may be even more invisible. Additionally, miscarriage can create stress in partner and family relationships as individuals cope in different ways and struggle to navigate the loss together (35, 39).

Miscarriage's broad impact on multiple family members, as well as on the relationships between partners and family members, highlights the need for care that is not only biopsychosocial, but also family-oriented. Clinicians working with women experiencing miscarriage can expand their assessment to include questions about the patient's support system and how those individuals are responding to the loss. This practice can increase the amount of support a family receives through opportunity to connect family members to behavioral health services, as well as offer other miscarriage support resources. BHPs can invite partners and family members to participate in the behavioral health services they provide their patients. This couple and family level of care can support family members in exploring their unique experiences of the

loss, meanings of the loss, issues related to identity and guilt, expression of grief, grieving together and separately, emotional intimacy after loss, physical intimacy after loss, and shared experiences of disenfranchisement (3, 28, 36, 39). Additionally, for primary care practices, the patient may be a partner or family member of someone who has miscarried; as part of a biopsychosocial approach applied to all patients, providers may discover the impact of miscarriage while treating these patients and have an opportunity to mobilize the clinic's additional resources for them as well.

## CONCLUSION

Though there is extensive research on psychological outcomes after miscarriage, primarily for women, there remain significant gaps in the literature base regarding a family-oriented understanding of the experience of miscarriage, family level grief outcomes and relational impacts, and biopsychosocial-oriented healthcare for patients and families facing this loss. Additionally, research has not yet tested the IBH model in miscarriage care. As an existing, evidence-based model of care (64, 65), IBH represents an important opportunity to address the limitations of current miscarriage care, as well as the barriers to implementation of family-oriented, biopsychosocial care (1, 41, 44).

As many patients' first point of care for miscarriage, healthcare providers are in a unique position to positively influence these patients' loss experiences. Empathic, biopsychosocial care can set a trajectory for successful coping and sufficient support, particularly during an experience that is often disenfranchised. By implementing an integrated behavioral health model of care, creating a protocol, and considering patients' larger familial context, healthcare providers can increase the amount of support and resources available to bereaved parents and their families.

## DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

## AUTHOR CONTRIBUTIONS

AH led the conception and outline of this manuscript. AH and AV contributed as co-authors to the full draft of the manuscript. All authors contributed to the article and approved the submitted version.

## REFERENCES

- Bellhouse C, Temple-Smith M, Watson S, Bilardi J. The loss was traumatic. some healthcare providers added to that": women's experiences of miscarriage. *Women Birth*. (2019) 32:137–46. doi: 10.1016/j.wombi.2018.06.006
- Hiefner AR. "A silent battle": using a feminist approach to support parents after miscarriage. *J Fem Fam Ther*. (2020) 32:57–75. doi: 10.1080/08952833.2020.1793563
- Bellhouse C, Temple-Smith M, Bilardi JE. "It's just one of those things people don't seem to talk about. "Women's experiences of social support following miscarriage: a qualitative study *BMC. Women Health*. (2018) 18:176–85. doi: 10.1186/s12905-018-0672-3
- Lang A, Fleischer AR, Duhamel E, Sword W, Gilbert KR, Corsini-Munt S. Perinatal loss and parental grief: the challenge of ambiguity and disenfranchised grief. *Omega J Death Dying*. (2011) 63:183–96. doi: 10.2190/OM.63.2.e

5. Bardos J, Hercz D, Friedenthal J, Missmer SA, Williams Z. A national survey on public perceptions of miscarriage. *Obstet Gynecol.* (2015) 125:1313–20. doi: 10.1097/AOG.0000000000000859
6. Magnus MC, Wilcox AJ, Morken NH, Weinberg CR, Häberg SE. Role of maternal age and pregnancy history in risk of miscarriage: prospective register based study. *BMJ.* (2019) 364:l869. doi: 10.1136/bmj.l869
7. Wilcox AJ, Weinberg CR, O'Connor JF, Baird DD, Schlatterer JP, Canfield RE, et al. Incidence of early pregnancy loss. *N Eng J Med.* (1988) 319:189–94. doi: 10.1056/NEJM198807283190401
8. Hasan R, Baird DD, Herring AH, Olshan AF, Jonsson Funk ML, Hartmann KE. Association between first-trimester vaginal bleeding and miscarriage. *Obstet Gynecol.* (2009) 114:860–7. doi: 10.1097/AOG.0b013e3181b79796
9. Prine LW, MacNaughton H. Office management of early pregnancy loss. *Am Fam Phys.* (2011) 84:75–82.
10. Slane VH. *Miscarriage*. National Library of Medicine StatPearls (2021). Available online at: <https://www.ncbi.nlm.nih.gov/books/NBK532992/> (accessed November 17, 2021).
11. MacDorman MF, Gregory EC. Fetal and perinatal mortality: United States, 2013. *Natl Vital Stat Rep.* (2015) 64:1–24.
12. Shreffler KM, Greil AL, McQuillan J. Pregnancy loss distress among U.S. women. *Fam Relat.* (2011) 60:342–55. doi: 10.1111/j.1741-3729.2011.00647.x
13. ACOG Committee of Obstetric Practice. ACOG Committee Opinion No. 443: Air travel during pregnancy. *Obstet Gynecol.* (2019) 114:954–5. doi: 10.1097/AOG.0b013e3181bd1325
14. Kones MO, Yildiz H. The level of grief in women with pregnancy loss: a prospective evaluation of the first three months of perinatal loss. *J Psychosom Obstetr Gynecol.* (2020) 1–10. doi: 10.1080/0167482X.2020.1759543
15. Tseng Y, Cheng H, Chen Y, Yang S, Cheng P. Grief reaction of couples to perinatal loss: a one-year prospective follow-up. *J Clin Nurs.* (2017) 26:5133–42. doi: 10.1111/jocn.14059
16. Davoudian T, Gibbins K, Cirino NH. Perinatal loss: the impact on maternal mental health. *Obstet Gynecol Surv.* (2021) 76:223–33. doi: 10.1097/OGX.0000000000000874
17. Johnson MP, Johnston RL. The psychological implications of a subsequent pregnancy outcome in couples with a history of miscarriage. *J Reprod Infant Psychol.* (2021) 39:16–29. doi: 10.1080/.2646838.2020.1792427
18. Smith LF, Ewings PD, Quinlan C. Incidence of pregnancy after expectant, medical, or surgical management of spontaneous first trimester miscarriage: long term follow-up of miscarriage treatment (MIST) randomized controlled trial. *BMJ.* (2009) 339:b3827. doi: 10.1136/bmj.b3827
19. Schreiber CA, Chavez V, Whittaker PG, Ratcliffe SJ, Easley E, Barg FK. Treatment decisions at the time of miscarriage diagnosis. *Obstet Gynecol.* (2016) 128:1347–56. doi: 10.1097/AOG.0000000000001753
20. Meaney, S. Corcoran P, Spillane N, O'Donoghue K. Experience of miscarriage: an interpretative phenomenological analysis. *BMJ Open.* (2017) 7:1–7. doi: 10.1136/bmjopen-2016-011382
21. Williams HM, Topping A, Coomarasamy A, Jones LL. Men and miscarriage: a systematic review and thematic synthesis. *Qual Health Res.* (2020) 30:133–45. doi: 10.1177/1049732319870270
22. Wojnar D. Miscarriage experiences of lesbian couples. *J Midwif Women Health.* (2007) 52:479–85. doi: 10.1016/j.jmwh.2007.03.015
23. Trepal HC, Semivan SG, Caley-Bruce M. Miscarriage: a dream interrupted. *J Creat Mental Health.* (2005) 1:155–71. doi: 10.1300/J456v01n03\_09
24. Volgsten H, Jansson C, Svanberg AS, Darj E, Stavreus-Evers A. Longitudinal study of emotional experiences, grief, and depressive symptoms in women and men after miscarriage. *Midwifery.* (2018) 64:23–8. doi: 10.1016/j.midw.2018.05.003
25. Farren J, Jalbrandt M, Emeye L, Joash K, Mitchell-Jones N, Tapp S, et al. Post-traumatic stress, anxiety and depression following miscarriage or ectopic pregnancy: a prospective cohort study. *BMJ Open.* (2016) 6:1–9. doi: 10.1136/bmjopen-2016-011864
26. Farren J, Mitchell-Jones N, Verbakel JY, Timmerman D, Jalbrandt M, Bourne T. The psychological impact of early pregnancy loss. *Hum Reprod Update.* (2018) 24:731–49. doi: 10.1093/humupd/dmy025
27. Voss P, Schick M, Langer L, Ainsworth A, Ditzen B, Kuon RJ. Recurrent pregnancy loss: a shared stressor—couple-orientated psychological research findings. *Fertil Steril.* (2020) 114:1288–96. doi: 10.1016/j.fertnstert.2020.08.1421
28. Furtado-Eraso S, Escalada-Hernandez P, Marin-Fernandez B. Integrative review of emotional care following perinatal loss. *West J Nurs Res.* (2021) 43:489–504. doi: 10.1177/0193945920954448
29. Callister L. Perinatal loss: a family perspective. *J Perinat Neonatal Nurs.* (2006) 20:227–34. doi: 10.1097/00005237-200607000-00009
30. Leon I. *Helping Families Cope With Perinatal Loss*. The Global Library of Women's Medicine (2008). Available online at: [http://www.glowm.com/index.html?p=glowm.cml/section\\_view&articleid=417](http://www.glowm.com/index.html?p=glowm.cml/section_view&articleid=417) (accessed May 15, 2021).
31. Doka KJ. *Disenfranchised Grief: Recognizing Hidden Sorrow*. Lexington, MA: Lexington Books D.C. Health & Co. (1989).
32. Meyer MDE. The paradox of time post-pregnancy loss: three things not to say when communicating social support. *Health Commun.* (2016) 31:1426–9. doi: 10.1080/10410236.2015.1077414
33. van der Houwen K, Stroebe M, Stroebe W, Schut H, van den Bout J, Wijngaards-De Meij L. Risk factors for bereavement outcome: a multivariate approach. *Death Stud.* (2010) 34:195–220. doi: 10.1080/07481180903559196
34. Bute JJ, Brann M, Hernandez R. Exploring societal-level privacy rules for talking about miscarriage. *J Soc Pers Relat.* (2019) 36:379–99. doi: 10.1177/0265407517731828
35. Hutti MH, Armstrong DS, Myers JA, Hall LA. Grief intensity, psychological well-being, and the intimate partner relationship in the subsequent pregnancy after a perinatal loss. *J Obstetr Gynecol Neonat Nurs.* (2015) 44:42–50. doi: 10.1111/1552-6909.12539
36. McDonald SA, Dasch-Yee KB, Grigg J. Relationship outcomes following involuntary pregnancy loss: the role of perceived incongruent grief. *Illness, Crisis Loss.* (2019) 1–11. doi: 10.1177/1054137319885254
37. Shreffler KM, Hill PW, Cacciatore J. Exploring the increased odds of divorce following miscarriage or stillbirth. *J Divorce Remarriage.* (2012) 53:91–107. doi: 10.1080/10502556.2012.651963
38. Vance JC, Boyle FM, Najman JM, Thearle MJ. Couple distress after sudden infant or perinatal death: a 30-month follow up. *J Paediatr Child Health.* (2002) 38:368–72. doi: 10.1046/j.1440-1754.2002.00008.x
39. Hiefner AR. Dyadic coping and couple resilience after miscarriage. *Fam Relat.* (2020) 70:59–76. doi: 10.1111/fare.12475
40. Swanson KM, Karmali ZA, Powell SH, Pulvermakher F. Miscarriage effects on couples' interpersonal and sexual relationships during the first year after loss: women's perceptions. *Psychosom Med.* (2003) 65:902–10. doi: 10.1097/01.PSY.0000079381.58810.84
41. Bilardi J, Sharp G, Payne S, Temple-Smith MJ. The need for improved emotional support: a pilot online survey of Australian women's access to healthcare services and support at the time of miscarriage. *Women Birth.* (2021) 34:362–9. doi: 10.1016/j.wombi.2020.06.011
42. Freeman A, Neiterman E, Varathasundaram S. Women's experiences of health care utilization in cases of early pregnancy loss: a scoping review. *Women Birth.* (2021) 34:316–24. doi: 10.1016/j.wombi.2020.07.012
43. Helps A, O'Donoghue K, O'Byrne L, Greene R, Leitao S. Impact of bereavement care and pregnancy loss services on families: findings and recommendations from Irish inquiry reports. *Midwifery.* (2020) 91:102841. doi: 10.1016/j.midw.2020.102841
44. Miller CA, Roe AH, McAllister A, Meisel ZF, Koelper N, Schreiber CA. Patient experiences with miscarriage management in the emergency and ambulatory settings. *Obstet Gynecol.* (2019) 134:1285–92. doi: 10.1097/AOG.0000000000003571
45. Jensen KLB, Temple-Smith MJ, Bilardi JE. Health professionals' roles and practices in supporting women experiencing miscarriage: a qualitative study. *Aust N Z J Obstet Gynaecol.* (2019) 59:508–13. doi: 10.1111/ajo.12910
46. deFiebre G, Srinivasulu S, Maldonado L, Romero D, Prine L, Rubin SE. Barriers and enablers to family physicians' provision of early pregnancy loss management in the United States. *Women Health.* (2021) 31:57–64. doi: 10.1016/j.whi.2020.07.003
47. Espey E, Ogburn T, Chavez A, Qualls C, Leyba M. Abortion education in medical schools: a national survey. *Am J Obstet Gynecol.* (2005) 192:640–3. doi: 10.1016/j.ajog.2004.09.013
48. Holt K, Janiak E, McCormick MC, Lieberman E, Dehlendorf C, Kajeepeta S, et al. Pregnancy options counseling and abortion referrals among US primary care physicians: results from a national survey. *Fam Med.* (2017) 49:527–36.

49. Shorter JM, Atrio JM, Schreiber CA. Management of early pregnancy loss, with a focus on patient-centered care. *Semin Perinatol.* (2019) 43:84–94. doi: 10.1053/j.semperi.2018.12.005
  50. Grauerholz KR, Berry SN, Capuano RM, Early JM. Uncovering prolonged grief reactions subsequent to a reproductive loss: Implications for the primary care provider. *Front Psychol.* (2021) 12:673050. doi: 10.3389/fpsyg.2021.673050
  51. Kong G, Chung T, Lai B, Lok I. Gender comparison of psychological reaction after miscarriage: a 1-year longitudinal study. *BJOG.* (2010) 117:1211–9. doi: 10.1111/j.1471-0528.2010.02653.x
  52. Olesen ML, Graungaard AH, Husted GR. Deciding treatment for miscarriage: experiences of women and healthcare professionals. *Scand J Caring Sci.* (2015) 29:386–94. doi: 10.1111/scs.12175
  53. Robinson J. Provision of information and support to women who have suffered an early miscarriage. *Br J Midwif.* (2014) 22:175–80. doi: 10.12968/bjom.2014.22.3.175
  54. DiMarco M, Renker P, Medas J. Effects of an educational bereavement program on health care professionals' perceptions of perinatal loss. *J Contin Educ Nurs.* (2002) 33:180–6. doi: 10.3928/0022-0124-20020701-10
  55. Reiter JT, Dobmeyer AC, Hunter CL. The primary care behavioral health (PCBH) model: an overview and operational definition. *J Clin Psychol Med Settings.* (2018) 25:109–26. doi: 10.1007/s10880-017-9531-x
  56. Vogel ME, Kanzler KE, Aikens JE, Goodie JL. Integration of behavioral health and primary care: current knowledge and future directions. *J Behav Med.* (2017) 40:69–84. doi: 10.1007/s10865-016-9798-7
  57. Cohen DJ, Balasubramanian BA, Davis M, Hall J, Gunn R, Stange KC, et al. Understanding care integration from the ground up: five organizing constructs that shape integrated practices. *J Am Board Fam Med.* (2015) 28:S7–20. doi: 10.3122/jabfm.2015.S1.150050
  58. Boudreaux JG, Crapanzano KA, Jones GN, Jeider TA, Dodge VH, Hebert MJ, et al. Using mental health outreach teams in the emergency department to improve engagement in treatment. *Community Men Health J.* (2016) 52:1009–14. doi: 10.1007/s10597-015-9935-8
  59. Carroll AJ, Jaffe AE, Stanton K, Guille C, Lazenby GB, Soper DE, et al. Program evaluation of an integrated behavioral health clinic in an outpatient women's health clinic: challenges and considerations. *J Clin Psychol Med Settings.* (2020) 27:207–16. doi: 10.1007/s10880-019-09684-6
  60. Miller-Matero LR, Dykuis KE, Albujoq K, Martens K, Fuller BS, Robinson V, et al. Benefits of integrated behavioral health services: the physician perspective. *Fam Syst Health.* (2016) 34:51–5. doi: 10.1037/fsh0000182
  61. Obst KL, Due C, Oxlad M, Middleton P. Men's grief following pregnancy loss and neonatal loss: a systematic review and emerging theoretical model. *BMC Pregn Childb.* (2020) 20:1–17. doi: 10.1186/s12884-019-2677-9
  62. Lockton J, Due C, Oxlad M. Love, listen and learn: grandmothers' experiences of grief following their child's pregnancy loss. *Women Birth.* (2020) 33:401–7. doi: 10.1016/j.wombi.2019.07.007
  63. O'Leary JM, Gaziano C. Sibling grief after perinatal loss. *J Prenat Perinat Psychol Health.* (2011) 25:173–93.
  64. Balasubramanian B, Cohen DJ, Jetelina KK, Dickinson M, Davis M, Gunn R, et al. Outcomes of integrated behavioral health with primary care. *J Am Board Fam Med.* (2017) 30:130–9. doi: 10.3122/jabfm.2017.02.160234
  65. Kwan BM, Valeras AB, Levey SB, Nease DE, Talen ME. An evidence roadmap for implementation of integrated behavioral health under the affordable care act. *AIMS Public Health.* (2015) 2:691–717. doi: 10.3934/publichealth.2015.4.691
- Conflict of Interest:** The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.
- Publisher's Note:** All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.
- Copyright © 2021 Hiefner and Villareal. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.