









Collaboration of an Obstetrical Residency Program With a Community Hospice/Bereavement Agency to Implement an Obstetrician Specific Educational Curriculum to Improve Care to Bereaved Families and Support Staff During Difficult Delivery Situations

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Abstract

Obstetricians face significant emotional and professional challenges caring for pregnant women experiencing fetal life-limiting diagnoses or fetal demise. Many physicians are uncomfortable offering the emotional support parents need during an unexpected end-of-life neonatal situation. Physicians who deliver life-changing bad news to families experience significant emotional and physical stress. We conducted an obstetrician needs assessment documenting interest in an educational curriculum that could enhance physician comfort and competency in communication skills; particularly for fetal abnormalities, challenging deliveries with poor outcomes, providing condolences to bereaved families and supporting colleagues after adverse outcomes. Patient-centered care requires prioritizing the needs and autonomy of each patient. Ensuring patients receive comprehensive informed consent regarding fetal diagnosis/prognosis and all available treatment options including continuing the pregnancy, termination, compassionate induction based on gestational age and personal wishes in cases of life-limiting fetal diagnoses, and delivery options including labor induction vs dilation and evacuation (D&E) is essential. We identified significant barriers. Some providers were reluctant to present termination as an option for life-limiting fetal diagnosis before 24 weeks of gestation. Many residents and faculty lacked sufficient training in the D&E procedure. The COVID-19 pandemic had disrupted essential hospital support resources. Our obstetrics residency program implemented a joint quality improvement initiative and educational research study. We collaborated with a community perinatal hospice/bereavement support organization to develop an obstetrician educational curriculum. We emphasized teamwork and consistency in delivering parent-centered bereavement

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care and support. To our knowledge, no similar program specific to an obstetrical residency program has been previously published.

Keywords

communicating bad outcomes for fetal abnormalities and fetal demise, life-limiting prenatal and neonatal prognosis discussions, OBGYN residency program, community perinatal hospice/bereavement program, vicarious trauma, management of second and third trimester fetal loss, obstetrician communication curriculum, quality improvement

Introduction: Problem Description

Obstetricians (OBGYN) face significant emotional and professional challenges when caring for pregnant women experiencing fetal loss or learning of a life-limiting diagnosis for their baby. These moments require a balance of clinical expertise and compassion, as providers navigate patients' grief while managing their own emotions. Obstetricians typically have long standing relationships with the women they care for, including frequent office visits during and after the pregnancy, as well as providing well woman care throughout the life span. The intimate nature of pregnancy and birth makes it difficult for obstetricians to deliver devastating news without internalizing the pain themselves. Many providers received limited training in handling sensitive situations during medical school and residency, leaving them unprepared to offer the emotional support patients need in a crisis. Physicians concentrate on the medical emergency to save lives, and that priority may limit their ability to deal with the emotional needs of the patient and family at that time and any subsequent consequences. This combination of emotional burden and high stakes care often leads to physicians and other health care workers experiencing feelings of inadequacy, guilt, and vicarious trauma (aka burnout), highlighting the urgent need for enhanced training and systemic support.¹⁻⁴

Our team recognized truly patient-centered care required prioritizing the needs and autonomy of each patient. This meant ensuring patients received comprehensive and informed consent regarding fetal diagnosis and prognosis, as well as all available medical and surgical options. This includes continuing the pregnancy, termination, or compassionate induction based on gestational age and personal wishes in cases of life-limiting fetal diagnoses. Patients need counseling on the differences in delivery options, such as medical labor induction or surgical dilation and evacuation (D&E) which may affect memory making opportunities depending on gestational age.

We identified significant barriers to achieving this level of care. Some providers were reluctant to present termination as an option for patients with a life-limiting fetal diagnosis before 24 weeks of gestation. Many residents and faculty members lack sufficient training in the D&E procedure, limiting their ability to offer full-scope counseling. The majority of D&E training occurs during family planning rotations, which are often restricted or unavailable at faith-based institutions like ours.^{5,6} The fall of *Roe v. Wade* has further reduced opportunities for residents to receive training in family planning.⁷

Consequently, patients may be steered toward medical management via labor induction rather than surgical management with D&E, introducing bias and limiting patient autonomy.

Research indicates patients who experience fetal loss benefit significantly when they are supported in choosing their preferred mode of delivery.⁸ This may range from requesting an immediate D&E for a woman experiencing existential stress knowing her baby is deceased within her and not wanting to carry it another day, to a woman who wants to go thru the labor experience.

The COVID-19 pandemic had disrupted essential institutional resources, further complicating patient care. Our staff experienced multiple losses and stressors during the COVID pandemic, including the inability to utilize normal coping methods such as critical stress debriefings, employee assistance programs, and in-person meetings. Peer-to-peer communication highlighted the urgent need for enhanced training and systemic support for physicians, their peers and other support staff after a series of poor maternal and fetal outcomes led to increased awareness of the incidences of vicarious trauma within the team.¹⁻⁴

Our goal was to assemble a network of partners to enhance our own institutional resources to improve accessible care and delivery of support systems for our patients no matter what plan they chose. Our program emphasizes peer and staff support, fostering teamwork and consistency in delivering parent-centered care throughout pregnancy, birth, and beyond with institutional and community bereavement support. To our knowledge, no similar program specific to an obstetrical residency program has been previously published.

Available Knowledge

We learned of Sufficient Grace Ministries Perinatal Hospice and Bereavement Support Services (SGM). They have provided support and resources to over 19 000 families experiencing pregnancy loss from miscarriages, fetal demise, stillbirth, and infants with life limiting diagnoses since 2013. Services include in-person hospital and funeral home support, care arrangements for inpatient and home hospice care, and ongoing bereavement care. Volunteer comfort doulas trained in the labor process, grief counseling and memory making can be with laboring moms who know their baby will be stillborn or die shortly after birth.⁹ SGM offers all options to families facing a life-limiting diagnosis and supports any decision the family makes.

All families have the option to participate in the development of a birth plan and memory making activities. Pre-planning for palliative care to manage neonatal pain and symptoms immediately after birth and hospice care options if needed for an infant born alive with limited life expectancy, can begin at any time in the pregnancy after diagnosis. Memory making activities may include hand or footprints, bathing and dressing the infant, or taking professional family photographs.¹⁰ The use of a cuddle cot cooling bed allows parents to keep a deceased infant in the room with them longer, allowing time for siblings or other family members to visit.¹¹

Our OBGYN residents also care for women experiencing miscarriage pregnancy loss. These individuals may present to the emergency department, our outpatient offices, or may need admission to the hospital for a D&C due to incomplete miscarriages where fetal tissue and other products of conception are retained in the uterus. Ten to 30% of all pregnancies end in a miscarriage. Eighty percent of miscarriages happen in the first trimester before the 12th week of pregnancy.¹²

The total number of pregnancies in the United States in 2019 (latest CDC available data) was estimated at 5,507,000 with 66.9% resulting in a live birth, 20% in pregnancy loss, and 13.1% from induced abortion.¹³ Stillbirth affects about 1 in 175 births, and each year about 21 000 babies are stillborn in the United States. Our state, Ohio, is in the top ten states in the United States for highest infant mortality.¹³

There are fewer resources for end-of-life care for neonates and families facing a life-limiting prenatal diagnosis. Hospitals are geared to providing lifesaving intervention, and hospice organizations are frequently limited to terminally ill adults and older children, resulting in a gap of experience and care during and immediately after pregnancy. A national survey of neonatal end of life (EOL) care professionals found 91.8% of respondents felt their institution would benefit from further education/training in neonatal EOL care.¹⁴ A review of neonatal EOL symptom management found a paucity of research studies and little data for neonates, leading to variability in clinical management of symptom assessment and management for this unique population.¹⁵ Two studies found focused on antenatal referrals to institutional palliative care services.^{16,17}

Rationale

Collaboration with a community-based perinatal-neonatal hospice/bereavement support organization helped us to identify and bridge a significant gap in patient care. Grieving families frequently share their personal experiences with the health care system with the community agency. How obstetricians, nurses and support staff communicate and care for them during their loss experience frames the family's perception and memories of their loss.¹⁸⁻²¹ Testimonials of families' experiences on the agency's website were insightful for obstetricians to review.⁹ Helping physicians understand the bereaved parent's perspective was essential. Families look to the physician as an authority and need honest answers that do

not contain false hope. Physicians need to understand the impact of their words and to change the way they discuss diagnosis options with parents experiencing a pregnancy loss or a life-limiting prenatal diagnosis. Providers are encouraged to use parent-friendly language, be sensitive and compassionate, offer options, and make a clear follow-up plan after communicating a difficult diagnosis. Our intent for the course was to increase physician comfort level in communicating with patients experiencing a loss, and to have a better understanding of the grieving parent's perspective.

Specific Aims

We developed the following aims for a formal educational program for OBGYN residents and faculty obstetricians in response to identified challenges and informed by principles of reproductive justice. This program seeks to improve care for families experiencing fetal loss while supporting the mental health well-being and competency of the health care teams who provide it.

1. Develop and distribute an obstetrician needs assessment to identify topics of immediate concern and interest.
2. Prioritize patient-centered care to meet the identified wishes of the mother and family for end-of-life care experiences that are culturally and spiritually desired.
3. Improve communication skills through simulated practice and role-play techniques for delivering bad news, addressing difficult prenatal diagnoses, pregnancy loss, planned hospice care, and impending infant loss.
4. Enhance surgical training by expanding education on dilation and evacuation procedures through collaboration with institutions specializing in these techniques and establish clear referral and transfer pathways for patients.
5. Equip health care team members with skills and resources to recognize and process the profound effects of indirect vicarious trauma (aka burnout) from exposure to the traumatic experiences of others through work experience.

Methods/Context

Institutional Review Board (IRB) educational exempt approval (#IRB 2022-16) was obtained from Mercy Health St. Vincent Medical Center in Toledo, Ohio where the work was conducted. Participants received verbal information about the research study and signed written consent forms prior to course implementation.

The Standards for Quality Improvement Reporting Excellence (SQUIRE 2.0) revised publication guidelines were used for this project. SQUIRE guidelines emphasize the context of the environment. Context is defined as "Physical and sociocultural makeup of the local environment (ie, external environmental factors, organizational dynamics, collaboration, resources, leadership) and the interpretation of

these factors (sense-making) by the health care delivery professionals, patients, and caregivers that can affect the effectiveness and generalizability of interventions".^{22,23}

This project was administratively endorsed by the Chief Medical Officer, Perinatal Loss Committee, Director of Grants, Program Director for the OBGYN Residency Program, Medical Director of Labor and Delivery, Nurse Manager for Maternal Services and the Hospice/Palliative Care Team. The unified support for this initiative was the single most important contextual factor in its success.

Considerations unusual to the project was the need to protect existing copyrights of the non-profit for material they had already developed and future material to be developed. The rights of the hospital institution and physician group to share physician-specific information at professional presentations was also agreed upon. This agreement included legal representation for both parties.

Funding

The institutional Foundation provided financial support for initial and ongoing physician and nurse training, manuals, textbooks, simulation materials, implementation expenses, memory books and gestational age-appropriate comfort items for individuals presenting to the Emergency Department/Clinic with miscarriages or post home delivery. The Foundation had no role in the design, implementation, interpretation or reporting of this project.

Interventions

Four interventions were implemented.

- Intervention #1 Physician Needs Assessment
- Intervention #2 - Development of the Obstetrician Educational Curriculum
- Intervention #3 - Pre and Post Training Self-Assessment of improvement in medical knowledge, confidence, and current clinical practice communication skills
- Intervention #4 - Intent to change current clinical practice and post course assessment

The physician needs assessment was initiated first as part of the overall quality improvement plan. Based on those results, 3 additional interventions were implemented under IRB approval. Each of the interventions will be individually discussed regarding outcome measures, results and analysis.

Intervention #1 Physician Needs Assessment

Residents developed and distributed a needs assessment in January 2022 to 9 institutional OBGYN attending physicians and 16 OBGYN residents for a total of 25 participants. Items included obstetrician learning needs for understanding perinatal loss, communication with families when delivering bad news/discussing poor outcomes, and grief management for obstetricians and staff following difficult

deliveries. Results were tabulated by Survey Monkey and finalized by the statistician.

Respondents ranked each area as high, medium, or low priority, and ranked their top 5 individual learning needs. While not in the top 5, options counseling was a significant topic of discussion based on the trimester of pregnancy in conjunction with item 1.

1. Antepartum management & counseling of diagnoses that are incompatible with life
2. Expressing condolences to patients and family
3. Comfort level in supporting parents through grief
4. Respectful disposition and funeral options
5. Address hindrances to patient-centered care & gaps patient-provider communication
6. Options counseling of acute medical vs surgical management of the pregnancy

See [Figure 1](#). Needs Assessment – Priority Level Reported by 25 Respondents.

Intervention #2 - Development of the Obstetrician Educational Curriculum

Identified needs were matched to the existing curriculum. Topics that were outside of immediate obstetrician concern were excluded due to time constraints. As the highest ranked response, diagnosis and management was extensively discussed in new content taught by the medical director of labor and delivery. Communicating all possible options in an unbiased fashion stressed informed decision-making. Total course time was 11 hours over several resident protected educational time sessions.

SGM offered an existing continuing medical education (CME) program for nurses, but they had never collaborated on a physician specific course. Based on results from the physician needs assessment, discussions with faculty and resident obstetricians, and SGM's extensive experience and interactions with parents, we jointly developed new physician content. This included physician-led discussions on diagnosis, prognosis, fetal considerations for medical and surgical treatment options based on each trimester of pregnancy, and follow-up care for genetic testing, future pregnancy considerations, and possible postpartum depression. SGM adapted their existing copyrighted standard course workbook to specifically meet the needs of the physician group.²⁴ A copy of the textbook written by SGM's director was included with the physician training materials.²⁵ Each portion of the training can be taught jointly or in separate didactic sessions. SMG has other hospital affiliations and intends to work with the physician team to offer community physician training.

The first course was held in the winter of 2022/2023. The OBGYN residency program consists of 4 residents per level of training, with 4 required years of residency training for a total of

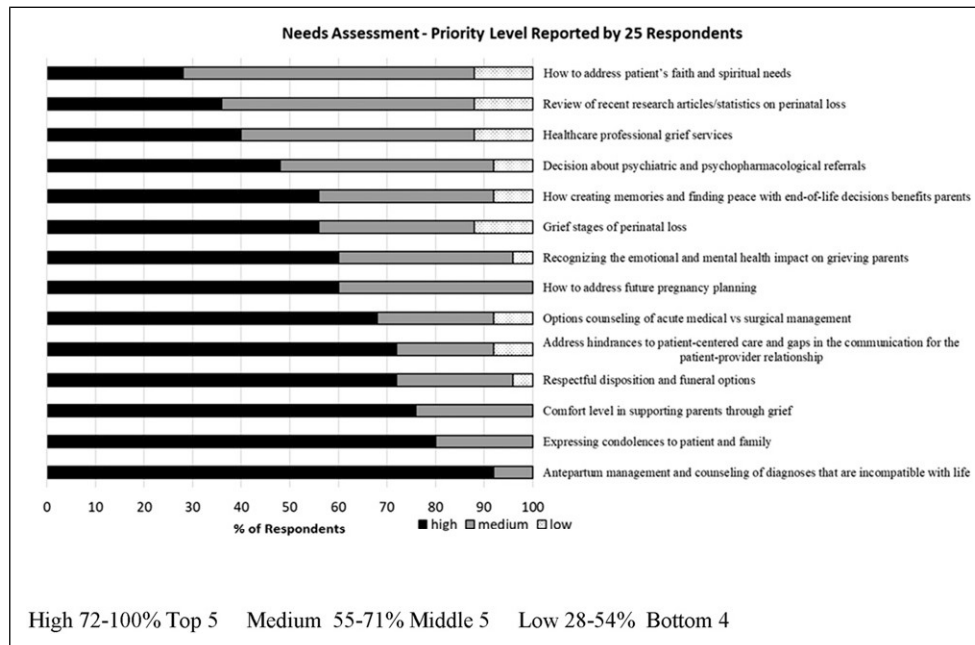


Figure 1. Physician needs assessment – priority level reported by 25 respondents.

16 residents. An additional 6 obstetrical faculty members participated in the course for a total of 22 participants. Due to the small number of participants, identifying data was only used to match pre-post course self-assessments and no other demographic information was collected.

Written precourse self-assessment surveys for existing knowledge, skills, and confidence level were distributed and collected in person after written IRB consent was obtained. Weekly protected educational time for resident didactics was used for physician specific presentations. Assigned pre-recorded audiovisual presentations from the non-profit presenters were available on a password protected website for residents to view on their own time. An in-person simulation lab was jointly conducted by non-profit and obstetrical faculty presenters. They role-modeled a mock delivery of an infant with a life limiting diagnosis, use of a Cuddle Cot for longer family visitation with a deceased infant, followed by small group role play, interactive presentations, and memory making activities. This session was videotaped for anyone unable to attend. Written post-course self-assessment surveys regarding knowledge, skills, confidence level, and intent to change practice behaviors were completed after course requirements were met.

This course has been repeated annually in the fall of 2023 and 2024 for each new 4 resident OBGYN class and any interested OBGYN resident/faculty members. Data was not collected or reported for these additional classes other than standard post didactic participant evaluations. On-going course improvements are made based on instructor observations, participant suggestions, and any new equipment or scientific data.

Specific improvements included more interactive role-playing scenarios relevant to an obstetrician-focused discussion.

Physicians requested more information on parent perspectives and post-mortem care including funeral home options and disposition of baby remains. We added speakers from the labor/delivery nursing staff and the spiritual care department to discuss the services and resources available to achieve the most comprehensive and consistent care for patients and their families. A mother who had received a life-limiting prenatal diagnosis and had been served by our collaborative team shared her experience. She re-connected with the doctor who had cared for her and her baby for the first time since giving birth. The impromptu debriefing resulted in an unexpected and powerful teaching moment, as the obstetrician displayed in real time, what it could look like to have a compassionate and connected debriefing conversation with a patient after she experiences a loss.

Intervention #3 - Pre and Post Training Self-Assessment of Improvement in Medical Knowledge, Confidence, and Current Practice Communication Skills

Pre-post course self-assessment interventions were included under IRB approval.

Statistical Methods

Responses from the self-assessments of medical knowledge and current clinical practice are presented as the number and percentage of participants who selected each response choice on a five-point Likert scale (where 1 = strongly disagree ... 5 = strongly agree) and the mode (the response choice that was

most frequently chosen), separately pre and post. Percentages are rounded to the nearest whole number; therefore, percentages may sum to more or less than 100%.

To examine the within-participant improvements in knowledge and clinical practice, we calculate the change as the participant's post-course score minus their pre-course score for every survey item. We are interested in the number of participants who improved their score by 1 point or more. (For example, if a student selected somewhat agree before the course and strongly agree after the course, this is considered an improvement of 1 point).

Data were analyzed with SAS v9.4.

See [Table 1](#) Pre and Post Scores on Self-Reported Survey (n = 22).

- All 22 participants reported an improved knowledge base of current statistics, professional practice recommendations and recent research studies for perinatal loss (question #10).

The median score was 2 (somewhat disagree) pre-education and increased to 4 (somewhat agree) post-education.

- All 22 participants reported an improved knowledge base of what perinatal hospice care includes and how to access local community resources (question #12). The median score was 2 (somewhat disagree) pre-education and increased to 5 (strongly agree) post-education.
- Ten of the 22 participants reported an increase in their agreement with question #24, I routinely go to a funeral visitation following the death of a mother and/or baby. The median pre-education score was 1 (strongly disagree) and the post-education the score was 2 (somewhat disagree).

All twenty-six questions had at least 45% (10 or more) of the participants report improved scores pre to post.

Table 1. Pre and Post Scores on Self-Reported Survey (n = 22).

Statement	Median Pre score	Mode Pre score	Median Post Score	Mode Post Score	Number of Participants who Increased their Response Score by 1 or More Level
Solid Knowledge base of...					
1 Diagnosis & pathophysiology	4	4	4	4	16
2 Diagnostic testing options	4	4	5	5	16
3 Antepartum life-limiting diagnosis	3	4	4.5	4	16
4 Spontaneous abortions	4	4	5	5	12
5 1 st trimester abortion options	4	4	5	5	15
6 2 nd trimester abortion options	3	3	5	5	18
7 Psychopharmacological management	3	4	5	5	16
8 Refer grieving women	3	3	5	5	20
9 Faith and spiritual needs	2	2	4.5	5	19
10 Recent research for perinatal loss	2	2	4	4	22
11 Future pregnancy planning	3	3	4	4	17
12 Hospice care	2	2	5	5	22
13 Collaborative palliative care	2	2	5	5	21
14 Resources at institution	2	2	5	5	20
15 Funeral options	2	2	4	5	21
Confident in my ability...					
16 Support grieving parents	3	3	5	5	18
17 Pregnancy options counseling	4	4	5	5	15
18 Pregnancy termination options	3	3	5	5	17
19 Prescribe medications	3	4	5	5	18
20 Employee assistance services	3	3	5	5	21
Routinely spend time...					
21 To answer questions & support	4	4	5	5	15
22 Encourage memory-making activities	2	3	5	5	18
23 Send a note or call	1	1	3	3	21
24 Attend funeral	1	1	2	1	10
25 Aware of barriers	2	2	4	4	19
26 Discuss funeral options	2	2	4	4	19

Response choices were a 5-point Likert scale where 1 = strongly disagree, 2 = somewhat disagree, 3 = neutral, 4 = somewhat agree, 5 = strongly agree.

Intervention #4 - Intent to Change Current Clinical Practice and Post Course Assessment

Intervention 4 was an open-ended response paper to identify what participants perceived to be most and least helpful in the initial course. Each question was assigned an a priori code and comments were coded accordingly. The complete list of qualitative comments are available as [supplemental material](#). A sample from each question is provided below.

[Was of most value to you/plan to incorporate into future clinical practice]

“I am much more comfortable counseling and dealing with fetal demise now, especially talking to patients and how to address their babies is significantly different then prior to the training.”

“It was valuable to speak to someone that has experienced loss and to hear how she wanted to be treated, encouraged to use the baby’s name, complimenting the baby etc.”

“This course helped me to be more comfortable talking to patients who have experienced perinatal loss. Before, I was uncomfortable having these conversations; I was afraid of saying/doing the wrong thing. The course provided me with the tools to navigate such conversations and feel comfortable doing so.”

[Would like More Information]

“How to deal with a patient that is shut down or angry. I am more comfortable with a patient who is grieving the death of their baby versus ones that are mad and do not want to engage or the patient who says, “No I do not want any memory making or acknowledgment of the baby.”

[Strongly disagreed with/felt presented with bias]

“How to navigate the patient’s feelings regarding the pregnancy. Most of the cases we worked through presented a situation where the mother strongly desired the pregnancy... I would like guidance on how to help women through a loss who had mixed emotions regarding the pregnancy.”

“At the beginning when the course was mainly the nonprofit, I felt the course wasn’t for doctors. I felt it was important that we were being provided with a non-physician perspective,[but] felt it was out of scope. However, when doctors ended the course with providing what specifics a physician needs, I realized it was a very well-rounded curriculum.”

Discussion

Institutional Context was the strength of this project. Having full administrative support to improve bedside care for our families and recognizing the need for peer support during difficult delivery situations provided a united goal.

Our physician needs assessment found there was no standard baseline knowledge of perinatal loss and communication skills among residents and faculty obstetricians. This is an important finding and relevant to the rationale for the course described in this paper. We learned to not assume what physicians know – ask them what they need, what their

priorities are, and have them use a ranked needs assessment for what is most important to their individual needs.

The basic metrics for knowledge and comfort level provided a basis for measuring improvements for the interventions, as well as the multiple qualitative comments from participants. Physicians report approaching difficult conversations with greater confidence and sensitivity, creating a foundation of trust and emotional support with patients. The improved education about D&E procedures, along with the establishment of a collaborative partnership with community experts in D&E, has strengthened our residents’ knowledge and skills. Our patients receive timely, comprehensive care, with access to the full spectrum of medical and surgical management options. By addressing vicarious trauma, we have empowered our health care team with the tools and resources to process their own emotional burdens, fostering resilience and promoting long-term well-being. This includes critical incident stress debriefings, peer support systems and employee assistance programs.

This project is generalizable to many hospital institutions. Quality improvement studies and the SQUIRE 2.0 guidelines endorse timelines and logs to document what worked and what didn’t work. Unlike research studies, which routinely do not describe failures, QI is highly dependent on context and resources. What works for 1 facility may not work for another, while what failed at 1 facility may be successful at another. Almost every group meeting, draft document developments, barriers, disagreements, successes, final working documents, didactic outlines, continuing medical education approval, presentation schedules, video recordings, final course materials and manuscript preparation for the past 4 years were recorded and continue to be documented, in the log.

The non-profit organization made adaptations to their existing copyrighted training based on the physician needs assessment, discussions with the residency program obstetricians, and the non-profit’s own experience with patients to create content relevant to physicians. The hospital obstetricians developed very specific physician content to address specific diagnostic and prognostic discussion topics parents need and expect their physicians to have with them. Each portion of the training can be taught jointly or in separate didactic sessions. The nonprofit has other hospital affiliations and intends to work with the physician team to offer community physician training.

There is no current publication that describes a collaboration between an OBGYN residency program and a community hospice/bereavement program to develop an obstetrician-focused communication skills educational curriculum. This curriculum was paired with the intentional use of trained nursing staff who had the opportunity to attend SGM’s original course and volunteer comfort doulas to support mothers and families during pregnancy, labor and after birth during difficult deliveries. While supportive studies from adult and perinatal/pediatric palliative care teams were located, there is a paucity of information specific to neonates.^{16,17}

This course filled an educational void for our staff. The knowledge and expertise the SGM collaboration shared was

invaluable. The level of teamwork and planning for known neonatal life limiting diagnoses have resulted in amazing birth plans that provide memories and a sense of control for families knowing the infant will not survive. We continue to grow and learn from each other and want to share the possibilities with others.

Changing the language that obstetricians use when giving a life-limiting diagnosis, building confidence in medical professionals' ability to interact with bereaved parents, offering parents options and resources, and communicating freely with the medical and community-based team, helps to alleviate regrets that can lead to complicated grief and additional trauma. Obstetrical providers will encounter hundreds of patients experiencing perinatal or neonatal loss over the course of their careers. Post-support interviews and surveys show that parents feel supported and express satisfaction with their care when providers are compassionate and supportive, when the life of their child is acknowledged and validated, and by treating the baby and family with dignity and care.^{17-20,25}

What has been noticeably different after this course is improved teamwork between nurses, SGM, other providers and obstetricians. Collaboration after diagnosis, during pregnancy, birth, and beyond, allows us to communicate with better team consistency to offer the best parent-centered care to families. We are proud to share the profound impact this program has had on our team and the families we serve. By prioritizing culturally competent, patient-centered care, we have elevated the patient experience, ensuring that patients facing the deeply personal experience of pregnancy loss is met with compassion, respect, and individualized support.

Limitations

The data components are limited to one course and 22 participants. The primary difficulty was fitting the educational program into available resident educational time. This manuscript describes only 1 of the quality improvement initiatives that were initiated in the Labor and Delivery department. This project depended on the expertise of SGM's extensive contact with families post-delivery to describe gaps in care from the parent's perspective and from the physician staff to describe gaps in medical care. Future studies should include data from the families who received care. The integrated use of a quality improvement project with an IRB approved research study complicated the reporting of findings. The SQUIRE 2.0 format most accurately reflected our overall ongoing QI efforts over time but is less frequently used in medical journals than in nursing or risk management journals. Headings such as rationale, context, and general discussion of intervention results even if those interventions are not successful, are unfamiliar to many readers expecting the standard research reporting format.

Fluctuations in budgets for health care organizations is always a risk to sustainability. We are working to diversify funding sources for long-term stability.

Conclusion

Continuation of this project means educating future obstetricians on community and hospital resources for both bereaved families and health care providers. Utilization of resources could lead to more comprehensive patient care by addressing the emotional needs of families receiving difficult diagnoses that extend beyond the hospital room. This project demonstrated the usefulness of collaboration between 2 agencies with very different areas of expertise and professional knowledge, who were able to learn from each other and share resources. Practicing how to effectively communicate with and support peers, patients and families to navigate the best possible experience in the face of incredible grief and loss has the potential to decrease vicarious trauma to everyone involved. Increasing obstetrician exposure to these encounters and conversations in a safe space, allows them to learn these dynamics and build confidence.

Future projects could include more extensive simulations and practiced encounters, introducing a more robust communications workshop addressing the nuances of both verbal and nonverbal communication, and a more specific focus on how obstetricians and support staff can mentally prepare if a poor outcome for the pregnancy is anticipated. We plan to conduct future studies to address how effectively we are meeting the needs of bereaved families.

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Author Contributions

Kelly Parker – Identified the need for the project, oversight of entire project, took the lead on obtaining administrative support, worked with the Foundation Grant manager to obtain funding for the project, developed and taught physician course content, actively worked with bereaved families and role modeled care to resident physicians, assisted with manuscript writing and critique, approved final version. **Kelly Gerken** – Director of nonprofit, responsible for overall course content, adapted existing curriculum to meet the needs of physicians, taught non-physician specific course content, actively worked with bereaved families and role-modeled care to resident physicians, assisted with manuscript writing and critique, approved final version. **Alicia Huckaby** – Director of OBGYN Residency program and responsible for all resident didactic content planning and implementation, identified the need for the project, coordinated resident physician QI for physician needs assessment, taught physician specific course content, actively worked with bereaved families and role modeled care to resident physicians, assisted with manuscript writing and critique, approved final version. **Amanda Gutek** – Current academic research coordinator, involved in all phases of the project including obtaining IRB approval and renewals, worked with CME director to obtain CME hours, secured classroom and simulation lab time, worked with AV department for online password protected videos, obtained written consent from participants, distributed, collected, tallied pre and post course assessments, assisted residents with physician needs assessment, institutional research day poster and podium presentations, assisted with manuscript writing and critique, approved final version. **Adrienne Freytag** – Key responsibility was ongoing maintenance of a running log for the project documenting every meeting, challenges, barriers, legal and ethical considerations, course time etc. so this project could be recreated by others. Also assisted with course training and simulations, development of adapted workbooks for physicians, and general administrative duties. Assisted with manuscript data and critique, approved final version. **Nancy Buderer** – Statistician and research consultant, independent from organization and reviewed data from all phases of the project including the physician needs assessment, pre/post course data, qualitative data coding etc. so all data for all phases of project coordinated by a single person who was not actively involved with the curriculum. Assisted with manuscript data and critique, approved final version. **Manda Rice** – Coordinated with Dr Parker to obtain administrative support and secure funding. Was responsible for overseeing all incoming funds and outcome expenses, provided financial records. Assisted with manuscript development and critique, approved final version. **Morgan Craig** – OBGYN resident for 2 years of this project, assisted with development of physician needs assessment, assisted with roleplaying and memory making teaching stations during simulation, actively cared for patients in difficult delivery situations. Offered resident viewpoint for improvements to curriculum. Currently an attending physician at Mercy Health and teaching residents, role modeling the curriculum content in real time. Assisted with manuscript data and critique, approved final version. **Maria Cacciotti** - OBGYN resident for 2 years of this project, assisted with development of physician needs assessment, assisted

with roleplaying and memory making teaching stations during simulation, actively cared for patients in difficult delivery situations. Offered resident viewpoint for improvements to curriculum. Currently an attending physician at Mercy Health and teaching residents, role modeling the curriculum content in real time. Assisted with manuscript data and critique, approved final version. **Julie Staumire** – Previous Academic Research Coordinator for Mercy Health, retired, continued to coordinate the study with Amanda Gutek as a volunteer consultant and project manager. Responsible for initial contact with Sufficient Grace Ministries to discuss interest in possible collaboration. Worked with residents on physician needs assessment QI, wrote initial IRB protocol and coordinated IRB submission, assisted with simulation video, assisted with research symposium posters and podium presentations, primary responsibility for manuscript oversight and coordination of all manuscript content from all authors. Experienced author with multiple PubMed publications. Provided expertise for QI and SQUIRE framework for project planning, assisted with critique of manuscript and approved final version.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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Ethical Statement

Ethical Approval

Institutional Review Board approval was obtained from Mercy Health North Institutional Review Board under the department of Research Oversight and Education, Mercy Health St. Vincent Medical Center, 2200 Jefferson Avenue, Toledo, Ohio 43604. IRB#2022-16. Approved April 4, 2022, with 2023 continuing review renewal for expedited Category 7: research on individual or group characteristics or behavior or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies. The research presented no more than minimal risk to human subjects. The IRB was closed on March 10, 2024.

Informed Consent









Written consent was obtained from each research participant after a verbal explanation of the project was provided with an opportunity to

ask questions. Consent was obtained prior to any precourse assessments or education. None of the participants withdrew consent.

Originality

The authors confirm this is our original work, that we have the rights to the work, that this is the first publication in this journal, that it is not being considered for/has not already been published elsewhere, and that we are not reproducing any copyrighted material that is not already owned by anyone but Sufficient Grace Ministries. Copyright issues have been handled by attorneys for both Mercy Health St. Vincent Medical Center and Sufficient Grace Ministries for existing and to be developed educational material as stated in the manuscript.

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Data Availability Statement

There are no current plans to make data available in a public data repository due to possible copyright issues and specific clinical situations that could be identified. All data included in this manuscript will be assigned copyright to Sage Publications per the authors agreement.

Supplemental Material

Supplemental material for this article is available online.

References

1. Scott SD, Hirschinger LE, Cox KR, McCoig M, Brandt J, Hall LW. The natural history of recovery for the healthcare provider “second victim” after adverse patient events. *BMJ Qual Saf.* 2009;18(5):325-330. doi:10.1136/qshc.2009.032870
2. Rivera-Chiauzzi E, Finney RE, Riggan KA, et al. Understanding the second victim experience among multidisciplinary providers in obstetrics and gynecology. *J Patient Saf.* 2022;18(2):e463-e469. doi:10.1097/PTS.0000000000000850
3. Kruper A, Domeyer-Klenske A, Treat R, Pilarski A, Kaljo K. Secondary traumatic stress in Ob-Gyn: a mixed methods analysis assessing physician impact and needs. *J Surg Educ.* 2021;78(3):1024-1034. doi:10.1016/j.jsurg.2020.08.038
4. Slade P, Balling K, Sheen K, et al. Work-related post-traumatic stress symptoms in obstetricians and gynaecologists: findings from INDIGO, a mixed methods study with a cross-sectional survey and in-depth interviews. *BJOG.* 2020;127(5):600-608. doi:10.1111/1471-0528.16076
5. Steinauer J, Freedman L. Institutional religious policies that follow obstetricians and gynecologists into practice. *J Grad Med Educ.* 2017;9(4):447-450. doi:10.4300/JGME-D-17-00376.1
6. Guiahi M, Hoover J, Swartz M, Teal S. Impact of catholic hospital affiliation during obstetrics and gynecology residency on the provision of family planning. *J Grad Med Educ.* 2017; 9(4):440-446. doi:10.4300/JGME-D-16-00496.1
7. Vachona D, Hildebranda MC, Averbach S, Turkb J, Steinauerb J, Modya SK. The impact of Dobbs v. Jackson on abortion training in obstetrics and gynecology residency programs: a qualitative study. *Contraception.* 2025;144:110808. [https://www.contraceptionjournal.org/article/S0010-7824\(24\)00522-5/fulltext](https://www.contraceptionjournal.org/article/S0010-7824(24)00522-5/fulltext). Accessed 3/25/2025.
8. Kerns J, Light A, Dalton V, McNamara B, Steinauer J, Kupperman M. Decision satisfaction among women choosing a method of pregnancy termination in the setting of fetal anomalies and other pregnancy complications: a qualitative study. *Patient Educ Couns.* 2018;101(10):1859-1864. doi:10.1016/j.pec.2018.06.012
9. Sufficient Grace Ministries Website. SGM support for families. <https://sufficientgraceministries.org/families>. Accessed 3/24/2025.
10. Sufficient Grace Ministries Website. Home page. <https://sufficientgraceministries.org/>. Accessed 3/24/2025.
11. Cuddle Cot Website. Commercial Product Information. Compassionate care shouldn't end after death. <https://cuddlecot.com>. Accessed 3/24/25.
12. American College of Obstetricians and Gynecologists. ACOG Practice Bulletin No. 200. Early pregnancy loss. *Obstet. Gynecol.* 2018;132(5):e197-e207. doi:10.1097/AOG.0000000000002899
13. US Centers for Disease Control and Prevention (CDC) Website. *Infant Mortality in the United States, 2020: Data from the period linked birth/infant death file. National Vital Statistics Reports.* Volume 71, Number 05 September 29, 2022. <https://www.cdc.gov/nchs/data/nvsr/nvsr71/nvsr71-05.pdf>. Accessed 12/4/2024.
14. Haug S, Farooqi S, Wilson CG, Hopper A, Ooei G, Carter B. Survey on neonatal end-of-life comfort care guidelines across America. *J Pain Symptom Manage.* 2018;55(3):979-984. doi:10.1016/j.jpainsymman.2017.10.023
15. Cortezzo DM, Meyer M. Neonatal end-of-life symptom management. *Front Pediatr.* 2020;8:574121. doi:10.3389/fped.2020.574121
16. Tewani KG, Jayagobi PA, Chandran S, et al. Perinatal palliative care service: developing a comprehensive care package for vulnerable babies with life limiting fetal conditions. *J Palliat Care.* 2022;37(4):471-475. doi:10.1177/08258597211046735
17. Bertraud S, Brightley G, Crowleg N, Craig F, Wilkinson D. Specialist perinatal palliative care: a retrospective review of antenatal referrals to a children's palliative care service over 14 years. *BMC Palliat Care.* 2023;22:177. doi:10.1186/s12904-023-01302-5
18. Gerken KM. *Walking with You: A Gentle Guide for Grieving Mothers.* 2nd ed. Sufficient Grace Ministries for Women, Inc; 2024.
19. Farrales LL, Cacciatore J, Jonas-Simpson C, Dharamsi S, Ascher J, Klein MC. What bereaved parents want health care providers to know when their babies are stillborn: a community-

- based participatory study. *BMC Psychol.* 2020;8(1):18. doi:10.1186/s40359-020-0385-x
20. Burden C, Bakhbakhi D, Heazell AE, et al. PAREnts' active role and ENgagement in the review of their Stillbirth/perinatal death 2 (PARENTS 2) study: a mixed-methods study of implementation. *BMJ Open.* 2021;11(3):e044563. doi:10.1136/bmjopen-2020-044563
 21. Sufficient Grace Ministries Website. SGM companioning method: evidence-based studies. <https://sufficientgraceministries.org/sgm-companioning-method-evidence-based-studies/>. Accessed 3/21/2025.
 22. Ogrinc G, Davies L, Goodman D, Batalden P, Davidoff F, Stevens D. SQUIRE 2.0 (Standards for Quality Improvement Reporting Excellence): revised publication guidelines from a detailed consensus process. *BMJ Qual Saf.* 2016;25(12):986-992. doi:10.1136/bmjqs-2015-004411
 23. Stausmire JM, Ulrich C. Using SQUIRE 2.0 as a guide for planning your quality improvement project. *Crit Care Nurse.* 2017;37(6):72-80. doi:10.4037/ccn2017572
 24. Gerken KM, Resident MOB, Provider E. *SGM perinatal, neonatal infant loss support training*. 1st ed. Sufficient Grace Ministries for Women Inc; 2022.
 25. Gerken KM. *Sufficient Grace: Standing on the Sacred Ground where Heaven Meets Earth*. 2nd ed. Sufficient Grace Ministries for Women, Inc; 2019.