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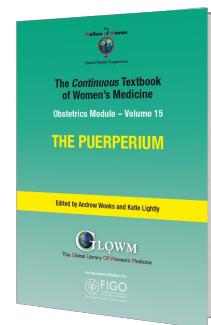
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Chapter

Care of Bereaved Parents After a Stillbirth

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INTRODUCTION

Stillbirth, defined by the World Health Organization (WHO) as the birth of a baby with no signs of life at or after 28 weeks of gestation, is a global problem.¹ In 2015, there were 2.6 million stillbirths, which equates to over 7000 deaths per day.² The vast majority (98%) were concentrated in low- and middle-income countries (LMIC) and 60% occurred in rural areas, mirroring the distribution of maternal deaths.^{2,3}

Stillbirth has been neglected by the global health agenda until recently. The publication of *The Lancet Ending Preventable Stillbirths Series* in 2016 has helped to clarify the medical, economic and psychosocial consequences of stillbirth and elevate it to a position of priority in health policy. Their renewed call to action frames the stillbirth rate as a direct measure of access to high-quality antenatal and intrapartum care, and highlights the global inequities that maintain the marked disparity in stillbirth rates between low- and high-income countries.³

The direct economic and psychosocial costs of a stillbirth are immense. Almost all parents report multiple negative psychological symptoms following loss of their baby, half of whom continue to experience these for over 4 years,⁴ and a recent systematic review estimates that over 4 million women worldwide are living with depression following stillbirth.⁵ Over a third of mothers reduce their working hours after a stillbirth, and bereaved parents returning to work exhibit only 63% of their usual productivity at work after 6 months.⁵ Suppressed grief, inconsistent bereavement care and the stigma surrounding stillbirth exacerbate trauma for parents and families. Perceived lack of empathy and divergent beliefs about mode of birth between bereaved parents and healthcare providers in the immediate aftermath of a stillbirth can compound the problem.^{5,6,7}

The Lancet series called for a "global consensus on a package of care after death in pregnancy or childbirth for the affected family, community and caregivers in all settings by 2020".³ Although accumulating evidence is being used to inform national care pathways in certain high-income countries, bereavement care remains strikingly inconsistent within

and between similar facilities.^{7,8} This chapter focuses on evidence-based principles for the provision of holistic care for bereaved parents and support for staff following diagnosis of a stillbirth, an area that has received little attention until recently, but has a vital role in the mitigation of the potentially devastating consequences of stillbirth. Incorporating evidence from systematic reviews and detailed qualitative studies of parent and staff perspectives, it provides an overview of how to deploy respectful, culturally appropriate bereavement care to mitigate negative long-term consequences for all involved.

PRINCIPLES OF BEREAVEMENT CARE AFTER STILLBIRTH: EVIDENCE FROM SYSTEMATIC REVIEWS

In 2009, the Cochrane collaboration conducted a systematic review assessing strategies and interventions designed specifically to support parents and families following perinatal death.⁹ However, all three trials identified as potentially eligible for inclusion were eventually excluded, largely due to high rates of loss-to-follow-up. An update in 2013 by Koopmans *et al.* again included no studies, but acknowledged the difficulty of conducting methodologically rigorous clinical trials in this field and emphasized the important potential role for alternative research designs.¹⁰

Ten years on, following a shift towards descriptive rather than quantitative studies, there is a small but growing body of evidence highlighting the key themes from bereaved parents' and healthcare providers' experiences of care after stillbirth, with a focus on developing practical guidance and international consensus on what constitutes excellent care. This includes three recent systematic reviews, which are summarized in Table 1 below.

Table 1 Summary of systematic reviews investigating parents' and healthcare providers' perspectives on care after stillbirth.

1. Burden *et al.*, 2016⁶

Systematic review and meta-summary of 144 studies from 25 countries, including 129 from high-income countries (HIC) and 15 from low- and middle-income countries (LMIC). Quantitative, qualitative and mixed-methods studies that investigated at least one potential psychosocial effect of stillbirth on bereaved parents or extended families were eligible for inclusion. 23 key themes were identified and frequency effect size (FES) was calculated for each, as a measure of prevalence in the included literature. The 23 themes included:

- **Negative psychological symptoms after the bereavement:** bereaved parents demonstrated high rates of anxiety, depression, social phobia, suicidal ideation and post-traumatic stress disorder. Some parents, particularly fathers, also reported increased substance misuse. Some mothers reported a complex change in perception of their own body after stillbirth, many citing their body's "failure" and their embarrassment about their postpartum body shape in the absence of a baby.
- **Disenfranchised grief:** parents felt that their grief was not legitimized and that their identity as parents was not acknowledged by society.
- **Feelings of regret about decisions made in the immediate aftermath of stillbirth:** many parents who had not spent time with or held their stillborn baby expressed regrets about their decisions. Others reported conflicting emotions about their decisions surrounding postmortem consent and highlighted the significant influence of healthcare providers in these decisions.
- **Relationship difficulties:** many bereaved couples reported separation or divorce following stillbirth, often citing discordant grieving patterns between the mother and father of the baby as the source of the difficulties. In some cases, this was associated with anger, infidelity and domestic violence. Conversely, some couples stated that their shared experience of loss had brought them closer.
- **Altered social behavior:** some bereaved parents demonstrated avoidance of activities that could bring them into contact with babies, children or anything that they associated with their own loss, leading to social isolation.
- **Stigmatization, rejection and abuse:** this was reported by women in the majority of LMIC represented in the study. Women frequently described being blamed for the death of the baby, with the stillbirth sometimes being portrayed as divine or supernatural retribution for sins or crimes committed by the mother. Some were abandoned by their partner, physically abused, forced to return to work immediately after the birth or ostracized by the entire community.

- **Employment and financial problems:** particularly in fathers in LMIC, the costs incurred through hospital care and funeral expenses led to financial instability, debt and exacerbation of family tensions. On their return to work, bereaved mothers were more likely to take extended sick leave than those with live children, and some reported feeling isolated and unwanted.
- **Therapeutic activities:** some bereaved parents altered their activities as part of a coping strategy following stillbirth, including voluntary social isolation and altered interest in religious and sexual activity. Physical exercise and increased engagement with social media, which was regarded as a forum that facilitated free discussion of parents' experiences, were generally viewed as beneficial.
- **Effect on subsequent pregnancies:** many parents experienced persistent psychosocial problems during subsequent pregnancies, including intense anxiety, panic attacks, constant fear of recurrent stillbirth and inability to participate in antenatal classes. Some parents also reported chronic pain, chronic fatigue and withdrawal from or distrust of healthcare services in their subsequent pregnancies.

The review identified several factors that negatively influenced parents' psychological state following stillbirth, including delay in induction of labor after the stillbirth was diagnosed; not seeing or holding the stillborn baby; ambiguity of burial arrangements; insensitive treatment by healthcare providers; and lack of a good social and family support network. Counseling, psychological treatment and sensitive support from staff involved in bereavement care were reported as positive factors.

2. Ellis *et al.*, 2016¹¹

Systematic review and meta-summary of 52 studies of parents' and professionals' experiences of care after stillbirth from nine high-income countries, including 38 focusing on parents, 12 focusing on staff, and two on both parents and staff. Quantitative, qualitative and mixed-methods studies were eligible for inclusion. In the meta-summary, 23 key themes for parents and eight key themes for staff were identified. Frequency effect size was calculated for each, as a measure of prevalence in the included literature.

Parent themes included:

- **The fundamental and memorable role of staff behavior on parents' experiences:** clear, structured information delivered with honesty, clarity, empathy and kindness helped bereaved parents to cope with their situation. Continuity of care was also particularly important, and increased parents' sense of security and reassurance throughout their experiences. In contrast, silence, uncertainty, hesitation and avoidance of eye contact by healthcare professionals led to feelings of neglect, isolation and stigmatization.
- **The importance of privacy, but not abandonment:** bereaved parents reported that their grief was compounded by seeing pregnant women or hearing other newborns crying, and appreciated the provision of a private room. However, they also valued supportive staff presence, and reported feelings of abandonment when left to wait for long periods of time after the diagnosis of stillbirth had been made, without full understanding of what would happen next.
- **Being involved in decisions around mode of birth:** many parents reported feeling shock and alarm when vaginal birth was presented as a "default" option. They appreciated being involved in discussions around options for delivery, particularly in terms of pain relief.
- **Spending time with the stillborn baby:** parents appreciated support and encouragement from staff to see and hold their baby. This helped to reinforce their identity as parents and the identity of the baby as part of their family.
- **Provision of supportive follow-up care:** parents valued ongoing practical and emotional support from staff after discharge from hospital and during the postnatal period. They found follow-up appointments helpful as part of the grieving process and also particularly benefited from baby loss support groups, either in person or through social media.
- **A need for improved training of staff involved in bereavement care:** the majority of parents felt that staff ought to receive specialist training in bereavement care following perinatal loss. Areas they highlighted included the ability to acknowledge the significance of a baby's death, to provide sensitive and comprehensive counseling about post-mortem and funeral arrangements, and to support them to express their concerns.

Staff themes included:

- **Providing perinatal bereavement care is emotionally challenging for staff:** midwives frequently described feeling apprehensive, overwhelmed and exhausted by having to provide perinatal bereavement care. They often felt

unprepared for the challenges involved and wanted more training and readily available tailored professional support.

- **Continuity of care:** staff described a close rapport with bereaved parents as vital in order to be able to provide high-quality care. They felt that establishing continuity and receiving appreciative feedback from couples could be rewarding, satisfying and fulfilling.

The review emphasized that parents and staff in HIC are well aligned in the priorities they identified for improving bereavement care, with enhanced staff training, continuity of care, and clear, supportive systems and pathways being particularly important.

3. Shakespeare *et al.*, 2019¹²

To complement their findings on care after stillbirth in HIC (Ellis *et al.*),¹¹ the same group subsequently published a similar systematic review investigating parent and staff experiences in LMIC (Shakespeare *et al.*),¹² where the burden of stillbirth is disproportionately high. The authors acknowledged the paucity of evidence-based recommendations surrounding provision of bereavement care in LMIC, and set out to determine themes that could be used to inform locally appropriate training, care pathways and guidelines.

This study represents the first synthesis of evidence on perinatal bereavement care in LMIC. 34 quantitative, qualitative and mixed-methods studies from 17 countries were included (29 conducted in middle-income countries and five conducted in low-income countries). 13 themes were identified, many of which were closely aligned with those identified from the group's previous systematic review in HIC. These include:

- **The role of emotional and psychological support:** support from staff, partners and the community can mitigate the negative psychological consequences of bereavement, as can therapeutic activities and support groups. Support should also include recognition of the wide-ranging manifestations of grief after stillbirth, many of which are not acknowledged or legitimized by healthcare professionals or wider society.
- **The importance of receiving clear information about what to expect after being diagnosed with a stillbirth:** this should include delivery, postnatal care, postmortem investigations, burial arrangements and implications for future pregnancies. The benefits of detailed investigation into the cause of stillbirth should be explained, given their potential to provide answers, facilitate acceptance of loss and reduce perceptions of guilt.
- **The value of specialized perinatal bereavement care:** an emphasis on involvement of parents in decisions, implementation of standardized guidelines, continuity of care and postnatal follow-up, and the importance of comprehensive training and robust support systems for staff, particularly in areas with high stillbirth rates.

However, the review also emphasized some important additional thematic elements that were unique to LMIC and, in some cases, directly conflicting with findings from HIC. These included:

- **Certain coping strategies that are widely valued by parents and endorsed by staff in HIC may not be applicable to LMIC:** the authors found that seeing or holding the stillborn baby was often culturally inappropriate and/or undesirable for bereaved parents in LMIC.
- **Societal attitudes unique to LMIC:** negative cultural perceptions of stillbirth, tendency to attribute baby loss to curses or evil spirits, disempowerment of women and domination of decision-making by a bereaved mother's partner or mother-in-law in certain LMIC contribute to higher rates of emotional abuse, neglect and physical violence. A significant proportion of women in LMIC reported feeling intense pressure to conceive again in the immediate aftermath of their stillbirth, with many regarding this as an opportunity to redeem themselves in their community and reaffirm their status of motherhood.
- **Lack of support for staff:** staff providing bereavement care in LMIC are likely to be exposed to high rates of perinatal loss, often combined with high rates of maternal morbidity and mortality. However, the higher emotional burden on healthcare providers is not reflected in resourcing for staff support systems, which are frequently inadequate.
- **Structural and organizational barriers to high-quality care that are unique to LMIC:** these include lack of psychological support facilities, failure of referral, understaffing of available services, lack of high-quality antenatal and intrapartum care and severely limited (or completely absent) provision of perinatal post-mortem investigations.

Many of these findings resonate closely with the LMIC-specific themes reported by Burden *et al.*⁶ and are discussed further in "Contrasting themes in high- vs. lower- and middle-income countries" below.

The reviewers highlight several limitations, including the low or medium quality of the majority of included studies, the over- and under-representation of certain individual countries or geographical areas in the meta-summary, the wide variation in cultural beliefs and healthcare provision both within and between LMIC and the paucity of studies specifically addressing the experiences of healthcare providers. They acknowledge that more research into perinatal bereavement care in LMIC is urgently required, but conclude that focusing on overlapping themes from their HIC and LMIC systematic reviews should pave the way towards development of a core set of universal standards for high-quality bereavement care after stillbirth.

Collaborating with other authors as the RESPECT Working Group (Research of Evidence-based Stillbirth care Principles to Establish global Consensus on respectful Treatment) and in direct response to *The Lancet's* call for a "global consensus on a package of care after death in pregnancy or childbirth"³ they have used a modified policy Delphi methodology to define eight core principles of high-quality stillbirth care. These are:

1. Reduce stigma experienced by bereaved women and families by increasing awareness of stillbirth within communities;
2. Provide respectful maternity care to bereaved women, their families, and their babies;
3. Support women and families to make shared, informed, and supported decisions about birth options;
4. Make every effort to investigate and identify contributory factors to provide an acceptable explanation to women and families for the death of their baby;
5. Acknowledge the depth and variety of normal grief responses associated with stillbirth and offer appropriate emotional support in a supportive environment;
6. Offer appropriate information and postnatal care to address physical, practical and psychological needs, including a point of contact for ongoing support;
7. Provide information for women and their families about future pregnancy planning and reproductive health at appropriate time points throughout their care and follow-up;
8. Enable the highest quality bereavement care by providing comprehensive and ongoing training and support to all members of the healthcare team.

By conducting a global survey, incorporating consultation with international stakeholders from 26 countries and selecting principles with high levels of concurrence across HIC and LMIC, the final recommendations have good chance of universal applicability, with the aim to benefit bereaved parents and families on a global scale.¹³

HIC, high-income countries; LMIC, low- and middle-income countries; FES, frequency effect size.

CONTRASTING THEMES IN HIGH- VS. LOWER- AND MIDDLE-INCOME COUNTRIES

The systematic reviews summarized above demonstrate both overlapping and starkly divergent themes in the experiences of bereaved parents and healthcare providers involved in their care in HIC as compared to LMIC. The perception of stillbirth as a devastating, life-changing event that triggers a complex grief reaction processed differently by mothers and fathers is universal. Respectful communication, provision of sensitive individualized counseling regarding mode of birth, post-mortem investigation with available resources, attention to the specific needs of fathers, dedicated postnatal follow-up, and a structured approach to training and support for staff involved in bereavement care are consistently identified as vital elements of high-quality care across studies from HIC and LMIC.

However, there are several subtle but important differences. Almost every stillbirth results in a sense of shame and guilt that may impact not just bereaved parents but also on families, staff and the whole of society, particularly where investigation into the cause of death is unavailable or inconclusive. Shakespeare *et al.*¹² describe how this "misplaced blame" can have contrasting implications: in LMIC, it is frequently directed towards the bereaved mother, exacerbated by supernatural beliefs and patriarchal society, which drives higher frequency of stigmatization and physical abuse.^{6,7,12}

In contrast, as epitomized by a recent study from Ireland,¹⁴ blame in HIC may be channeled towards healthcare providers, which leads to fear, disengagement and reluctance among staff to participate in bereavement care. Improved public education about the causes of stillbirth may be a useful intervention to counter both manifestations, reducing stigmatization for parents and staff, and promoting transparency around the investigation and reporting of stillbirth.

Feeling pressurized to have another child after a stillbirth is also particularly prominent for women in LMIC.¹² This is

likely to reflect deeply embedded societal values that derive women's intrinsic value from their fertility, and may contribute to the observation that seeing, holding and spending time with the stillborn baby is often less appealing to parents in LMIC than in HIC.^{12,15} Given that the majority of women will conceive within a year of a stillbirth¹⁶ and the well-documented potential for previous loss to compromise a mother's mental health during subsequent pregnancies,⁶ this renders women in LMIC who have had a stillbirth especially vulnerable to recurrent or chronic psychological problems.

Bereaved mothers in LMIC are also far more likely than those in HIC to have experienced severe obstetric complications immediately prior to the stillbirth that may have long-lasting implications for their own health. This can translate into long-term reduction in quality of life, pervasive fears about their health and altered perception of healthcare systems and providers.^{6,12}

Finally, healthcare workers in LMIC face a multitude of barriers to provision of high-quality care following stillbirth. In countries with high rates of obstetric emergencies and maternal mortality, staff may prioritize physical health and survival over psychological well-being, with bereavement care correspondingly perceived as less important than medical care. These circumstances are exacerbated by overcrowding, staff shortages, poor supervision, lack of training and rudimentary or non-existent support services for staff, which in turn contribute to loss of motivation and burnout. Stigmatization of bereaved parents may extend to the staff involved in their care, especially where there are financial and logistical barriers to perinatal post-mortem investigations.

A PRACTICAL GUIDE FOR CARE OF BEREAVED PARENTS AFTER A STILLBIRTH

Respectful maternity care

The 50% reduction in global maternal mortality between 1990 and 2015 reflects significant increases in the provision and use of maternity services, with three-quarters of women now supported by a skilled birth attendant at delivery. However, stark discrepancies persist and a woman's lifetime risk of dying due to complications or pregnancy or birth is still over 100 times higher in sub-Saharan Africa than in high-income countries. The significant rise in facility-based childbirth has exposed a plethora of failings in maternity care that range from inadequate resources to disrespect and physical abuse.¹⁷ WHO has collated reports that include accounts of forced medical procedures, violations of privacy, refusal to give analgesia and neglect of women with life-threatening obstetric complications. Groups that are particularly vulnerable include adolescents, migrant women, those with low socio-economic status and women with HIV. In a 2014 statement condemning these behaviors WHO also outlined and promoted the key principles of "respectful maternity care", emphasizing women's rights to the highest attainable standards of obstetric care and the fundamental importance of preserving dignity, confidentiality, choice and equality.¹⁸

Although the concept of respectful maternity care has met with little resistance, defining and implementing it has proved more challenging. A recent systematic review of five studies in which a respectful maternity care policy was compared to usual maternity care demonstrated promising results: there were significant reductions in both reported and observed physical abuse and an improvement in women's experiences of their maternity care.¹⁹ While international consensus is awaited on universal standards for respectful maternity care, all staff caring for pregnant women should aim to adopt and promote these principles, particularly in the context of a devastating event such as stillbirth.

Making the diagnosis of stillbirth

Real-time ultrasound examination, with direct visualization of the absence of fetal cardiac activity, is the "gold standard" for the diagnosis of intrauterine fetal death. This should be performed by a trained operator and a second opinion should be sought whenever this is logistically feasible. Imaging may be technically difficult, especially in the presence of maternal obesity or extensive abdominal scarring. Views can be optimized through the use of color Doppler studies of the fetal heart and umbilical cord, if available. Additional sonographic features consistent with the diagnosis of intrauterine fetal death include fetal skull collapse with overlapping bones, hydrops, gross skin edema, maceration and intrafetal gas (often localized within the heart, blood vessels and joints). Although evidence of occult placental abruption may be identified, ultrasound has low sensitivity for abruption overall and even large abruptions can be missed.²⁰

Other techniques, including cardiotocography or auscultation with either Doppler ultrasound or a Pinard stethoscope,

are not sufficiently accurate and should be avoided – in one published series of 70 third-trimester pregnancies in which fetal cardiac activity was undetectable on auscultation, 22 were found to have viable fetuses.^{20,21} In particular, Doppler ultrasound auscultation may offer false reassurance by detecting maternal pelvic blood flow.

However, in countries where reliable access to ultrasound is not guaranteed, a pragmatic approach to suspected intrauterine fetal death is required. This is a challenging scenario for which there are no evidence-based recommendations, but is a common dilemma in the LMIC where the vast majority of stillbirths occur. A sensible approach could include the following: (1) handheld Doppler ultrasound assessment by at least two different healthcare providers; (2) arrange transfer to a local facility within reasonable distance where ultrasound is available, if it is safe to do so; (3) if at full term, induce labor using usual methods; (4) if preterm, use a combination of handheld Doppler and/or Pinard auscultation by at least three different healthcare providers, then wait 24 hours and assess again before taking any definitive action.

If the woman is unaccompanied, staff should offer to contact her partner, relatives or friends at the earliest possible opportunity. Women should also be advised that they may continue to feel (passive) fetal movements after the diagnosis has been made.²⁰

Communicating the diagnosis

Stillbirth is a catastrophic event for parents, and they recognise that it is also difficult for staff.⁷ All staff involved in making or conveying the diagnosis of a baby's death and in the immediate aftermath should remember that their behavior is hugely influential and memorable for the affected family. Table 2 summarizes staff behaviors and practical factors that can significantly impact parents' experiences of the initial diagnosis of stillbirth:

Table 2 Factors that affect parents' experiences of the initial diagnosis of stillbirth^{6,7,11,12}

	Positive factors	Negative factors
Staff behaviors	<ul style="list-style-type: none"> • Clear, respectful communication • Simple language • Direct eye contact • Straightforward expression of empathy and reassurance • Physical presence of staff • Slow "drip-feed" of information • Frequent updates on what to expect • Time to consider their options • Treating the stillbirth as an emergency • Acknowledging the mother and father as parents, and the baby as a member of their family • Speaking to both parents at the same time 	<ul style="list-style-type: none"> • Topic avoidance • Silence or hesitation • Uncertainty • Detached attitude • Excessive focus on adhering to guidelines rather than providing emotional and practical support • Immediate shift towards managing medical rather than emotional aspects • De-prioritizing a woman's care • Excluding the father from discussions • Leaving a couple alone for long periods
Practical factors	<ul style="list-style-type: none"> • Provision of a private room • Efforts to minimize delay in confirming the diagnosis • Involvement of a staff member who can confidently confirm death of a baby on ultrasound scan • Warning the parents about a period of silence during the ultrasound scan • Continuity of care 	<ul style="list-style-type: none"> • Interruptions • Having to move to different rooms • Long delay in confirmation of the suspected death of a baby • Proximity to sounds of women in labor or babies crying • Multiple different staff involved

An overview of factors associated with stillbirth

Table 3 summarizes the causes of stillbirth, all of which should be considered during care of the parents in the immediate aftermath.

Table 3 Maternal, fetal, placental and intrapartum causes of stillbirth^{22,23,24,25}

Maternal	Fetal	Placental	Intrapartum
Pre-eclampsia	Fetal growth restriction	Placenta previa	Obstructed labor
Maternal infection	Structural anomalies	Vasa previa	Hypoxia-ischemia
Maternal diabetes	Fetal aneuploidy	Antepartum hemorrhage	Cord prolapse
Obstetric cholestasis	Fetal infection	Placental abruption	Other cord accidents
Anti-red-cell or anti-platelet antibodies	Multiple pregnancy	Velamentous cord insertion	Uterine rupture
	Feto-maternal hemorrhage	Histopathological diagnoses, e.g. infarction, villitis, peri-villous fibrin deposition, delayed villous maturation, thrombotic vasculopathy	
	Hemolytic disease		

Recent detailed analyses in the US and the UK have also identified associations between stillbirth and the following maternal factors:^{26,27}

- nulliparity
- previous stillbirth
- maternal overweight or obesity
- maternal smoking
- extremes of maternal age (<20 or >40 years)
- Black ethnicity
- socio-economic deprivation
- not living with a partner
- history of maternal drug abuse or addiction
- maternal AB blood type.

Clinical investigations

Following diagnosis of a stillbirth, a panel of laboratory tests should be recommended for two principal reasons: first, to evaluate maternal well-being; and second, to help determine the cause of fetal death. Parents should be counseled on the indications for these tests. It is also important to emphasize that although there is no cause identified in a large number of stillbirths, if an underlying cause *is* detected then this could help to reduce the risk of developing further obstetric complications and reduce the risk of recurrence in subsequent pregnancies.²⁰

Table 4 summarizes the recommended investigations for women diagnosed with stillbirth.

Table 4 Recommended investigations for women diagnosed with stillbirth²⁰

Test	What the test can detect	Comments
Maternal investigations		
1	Maternal blood for: <ul style="list-style-type: none"> • Hematology (full 	<ul style="list-style-type: none"> • Evidence of sepsis • Evidence of occult hemorrhage
		Platelet count should be repeated twice weekly to check for occult disseminated intravascular coagulation (DIC)

Test	blood count) • Biochemistry (renal & liver function) • C-reactive protein • Bile acids • Thyroid function	• Pre-eclampsia and its complications What the test can detect Obstetric • cholestasis • Occult maternal thyroid disease	Comments
2	Maternal coagulation profile and plasma fibrinogen	DIC	Pre-eclampsia, maternal sepsis, placental abruption and expectant management of delivery increase the likelihood of DIC. Maternal coagulation profile is also important prior to any regional anesthesia
3	Kleihauer	Feto-maternal hemorrhage	Feto-maternal hemorrhage can cause fetal death and Kleihauer is advised for all women, regardless of Rhesus status. The test should be performed prior to delivery of the baby as fetal red cells may be rapidly cleared from maternal circulation. In Rhesus-negative women, a second Kleihauer test will indicate whether sufficient anti-RhD has been administered
4	Maternal septic screen: • Blood culture • Midstream urine culture • Vaginal swabs • Endocervical swabs	Maternal bacterial infection, e.g. <i>Listeria monocytogenes</i> , group B streptococcus, Chlamydia spp.	A complete septic screen is indicated in the presence of: • Maternal pyrexia • Coryzal symptoms • Offensive or purulent liquor • Prolonged rupture of membranes If there is suspicion of maternal infection, broad-spectrum antibiotics should be commenced according to local guidelines/availability, and adjusted according to microbiology results
5	Maternal serology: • Viral infections • Syphilis • Other infections as indicated by travel history	Other maternal or transplacental infection	Viral screening should include parvovirus B19, rubella, cytomegalovirus and herpes simplex. These should be compared with stored serum from antenatal booking tests, if available. Toxoplasma and treponemal serology should also be checked. Consider additional tests according to maternal history, e.g. travel to a malaria-endemic area: malarial parasitemia has been associated with stillbirth ²⁸
6	Maternal random blood glucose and HbA1c	Occult diabetes	Raised maternal blood glucose may indicate undiagnosed gestational diabetes mellitus, while elevated HbA1c could suggest occult type 1 or type 2 diabetes
7	Maternal thrombophilia screen	Maternal thrombophilia	In the presence of fetal growth restriction or other evidence of placental insufficiency, maternal thrombophilia screening is recommended (if available). As some tests can be affected by pregnancy, any abnormal results should be repeated after 6 weeks
8	Anti-red cell antibodies	Immune haemolytic disease	Indicated in the presence of fetal hydrops, detected clinically or on post-mortem examination
9	Maternal autoantibodies: anti-Ro and anti-La	Occult maternal autoimmune disease, e.g. Sjogren's syndrome	Indicated in the presence of fetal hydrops, endomyocardial fibro-elastosis or calcification of the atrio-ventricular node on post-mortem examination

10 Test	Maternal anti-platelet antibodies	Fetal and neonatal alloimmune thrombocytopenia What the test can detect	Indicated in the presence of fetal intracranial hemorrhage on post-mortem examination Comments
11	Parental blood for karyotype	Parental genetic abnormalities, e.g. balanced translocations or mosaicism	Indicated in the presence of: <ul style="list-style-type: none"> • Known or suspected fetal aneuploidy or other abnormality • Previous unexplained stillbirth • Recurrent miscarriage
Fetal and placental investigations			
12	Microbiology: <ul style="list-style-type: none"> • Fetal blood culture • Fetal swabs • Placental swabs 	Fetal infection	Fetal and placental microbiology is generally more informative than maternal serology in the detection of occult viral infections. Informed parental consent should be obtained before sending fetal blood samples
13	Fetal and placental tissues for karyotyping: <ul style="list-style-type: none"> • Fetal skin biopsy • Fetal cartilage • Placenta 	Aneuploidy Monogenic disorders	Approximately 6–13% of stillborn babies will have a chromosomal abnormality. ^{20,29,30} Samples must be carefully prepared and stored according to laboratory guidelines. Written informed parental consent is essential
14	Post-mortem examination of the baby and/or placenta, including any or all of: <ul style="list-style-type: none"> • External examination • Full autopsy • Imaging • Placental pathology 	Wide variety of causes of fetal death, including congenital abnormalities and placental disorders	Written informed parental consent is essential. <i>See paragraph below on the value of post-mortem examination.</i>

In a Swedish study of 314 women, 95% reported that it felt important to seek an explanation of their baby's death.³¹ On that basis, it is important to make parents aware that of all the investigations listed above, post-mortem examination of the baby and placenta offers the highest diagnostic yield. A population-based study in the US of 500 post-mortem examinations following stillbirths demonstrated that post-mortem examination alone could identify a probable cause in 60.9% of cases and a possible or probable cause in 76.2%. Parents who are reluctant to consent to full fetal post-mortem can be reassured that placental pathology may also help to provide answers – in another cohort study in the US, placental pathology (when combined with clinical information and laboratory investigations) demonstrated a probable cause of death in 61.1% of cases.³²

Healthcare providers can also reassure parents that opting for post-mortem examination does not create significant delays in clinical follow-up.⁷

Timing of birth

Following the diagnosis of a baby's death *in utero*, the majority of women will wish to proceed with delivery of the baby within the next 48 hours.³³ In the presence of ruptured membranes, placental abruption, sepsis or pre-eclampsia,

women should be strongly counseled to proceed with steps towards expedited delivery.

In contrast, if the mother is physically well, the membranes are intact and there are no laboratory features of DIC, a more flexible approach can be adopted and it is reasonable for these women to delay their birth for a short period. The minority who wish to delay the process and opt for expectant management must be carefully counseled about the potential risks.²⁰ These include:

1. DIC (10% risk within the first 4 weeks of fetal death, which rises to 30% thereafter; women who choose to delay delivery for >48 hours after fetal death should be advised to have laboratory testing for DIC twice weekly).^{20,34} However, the degree of maceration (and accordingly interval between death and birth) does not correlate with the risk of DIC, with placental abruption being more predictive of DIC.^{35,36}
2. Increased risk of anxiety: in a Swedish case-control study of 380 women diagnosed with stillbirth, an interval of 24 hours or longer from the diagnosis of the baby's death to the onset of labor was associated with a higher risk of moderate or severe anxiety.³⁷
3. A deterioration in the appearance and physical condition of the baby: as well as being distressing for the parents, this can limit the value of any subsequent post-mortem investigations, particularly if significant maceration develops.

Mode of birth

Careful consideration must be given to the mode of delivery. Vaginal birth is the safest option for the majority of women, and can be achieved within 24 hours of induction of labor in approximately 90% of women who have been diagnosed with a stillbirth.³⁸ There is good evidence to support the use of a combination of mifepristone and some form of prostaglandin as the first-line method for induction of labor, although precise regimens may vary widely in terms of dosing, schedule and route of administration.^{38,39} Of the prostaglandin preparations available, misoprostol is the best option: it has equivalent efficacy to gemeprost,⁴⁰ is more effective than prostaglandin E₂,^{41,42} and is significantly cheaper than both.^{42,43} Misoprostol can be administered via oral, sublingual or vaginal routes, each of which has its advantages and disadvantages. Two randomized trials have compared oral vs. vaginal misoprostol for induction of labor in women whose baby has died, with one demonstrating a shorter induction-to-delivery interval with the vaginal route⁴⁴ and both showing a higher frequency of systemic adverse effects (including pyrexia, diarrhea and vomiting) with oral regimens.^{44,45} A 2014 Cochrane review concluded that while oral and vaginal misoprostol have equivalent efficacy, oral regimens are preferable in terms of safety given the risk of ascending bacterial infection during induction of labor, particularly if there are insufficient resources to allow close monitoring for signs of sepsis.⁴⁶

Two randomized trials have demonstrated that when compared to misoprostol alone, the addition of a single oral dose of 200 mg mifepristone appears to shorten the duration of labor and increase the proportion of women who deliver within 24 hours of receiving their first misoprostol dose.^{47,48}

Determining the dosing schedule for misoprostol regimens is a challenge that requires a careful balance between the primary goal of achieving timely vaginal delivery against the equally important priority of minimizing the risk of complications arising from repeated doses of misoprostol, the most serious of these being uterine rupture.

Abnormalities in the fetal heart rate, usually the first sign of scar dehiscence, cannot be used when the baby has died. Healthcare providers must therefore be particularly vigilant for other signs of rupture, which include unexplained maternal tachycardia, persistent or atypical abdominal pain, hematuria, vaginal bleeding, significant drop in maternal hemoglobin or maternal collapse.

In 2017, the International Federation of Gynecology and Obstetrics (FIGO) published dosing recommendations for induction of labor with mifepristone-misoprostol regimens in women without previous cesarean section.⁴⁹ Where stillbirth has been diagnosed and there is no history of cesarean section, the FIGO guidelines can be followed. However, the situation is less straightforward for mothers with one or more previous cesarean sections, in whom the risk of uterine rupture is higher and mechanical methods of induction may be safer. Box 1 summarizes the latest available evidence on how best to manage induction of labor in women with stillbirth who have had one or more previous cesarean sections:

Box 1 Summary of recommendations for induction of labor in women who have been diagnosed with stillbirth, according to gestational age and obstetric history.

1. Women with an unscarred uterus

FIGO recommends a single 200 mg dose of mifepristone, followed by:

- 13–26 weeks: 200 µg of misoprostol every 4–6 hours
- 27–28 weeks: 100 µg of misoprostol every 4 hours
- >28 weeks: 25 µg of misoprostol, either vaginally every 6 hours or orally every 2 hours.⁴⁹

2. Women who have had one previous cesarean section

FIGO have advised that for women with one previous cesarean section and intrauterine death at 13–26 weeks' gestation, the misoprostol regimen above can still be safely used. However, they also state that there is insufficient evidence to recommend a misoprostol regimen after 26 weeks' gestation in these circumstances, and advise following local protocols instead.⁴⁹

All women with a previous cesarean section should be counseled about the two- to three-fold increased risk of uterine rupture in induced labor compared to spontaneous labor. Misoprostol regimens may still be feasible in centers where women can be monitored closely for signs of uterine rupture, but mechanical methods of induction may be safer:

- In a multicenter American study of 209 women with one previous cesarean section and a diagnosis of stillbirth, uterine rupture occurred in 3.4% of those whose labor was induced (all of whom also received intravenous oxytocin)⁵⁰
- A second large American retrospective series of 611 women with one previous cesarean section and a diagnosis of stillbirth demonstrated a 91.1% rate of successful vaginal birth in those whose labor was induced, with a 4.4% rate of uterine rupture.⁵¹
- A third study comparing hormonal and mechanical methods for induction of labor in women with one previous cesarean section showed significantly lower rates of uterine rupture when mechanical methods were used (0.58% vs. 1.59%).

3. Women who have had two or more previous cesarean sections

There are no studies specifically investigating the safety of induction of labor in women with stillbirth who have had two or more previous cesarean sections. However, large-scale data from those with live babies demonstrate increased risk of uterine rupture as well as other maternal morbidity (e.g. hysterectomy and requirement for blood transfusion) in women who have had two or more previous cesareans, compared to those who have had only one.⁵² If safe cesarean section and facilities for managing surgical complications are available, this should be considered on an individualized basis, taking into account the mother's wishes.

Although induction of labor and vaginal delivery poses the lowest physical risk to women,⁵³ attitudes among parents vary widely and staff should not assume that bereaved couples are aware of this consensus. While some parents instinctively believe that vaginal birth is the more "normal", "natural" or dignified method, others may be appalled by the prospect of the pain of labor or perceive cesarean birth as an option that allows them to restore some control over the situation and is less traumatic for the baby.^{7,11,54,55} Parents strongly resent attempts to persuade them to have a vaginal birth on the basis that this will be more beneficial for the mother in future pregnancies, as they feel this represents a failure to acknowledge the loss of their baby.

However, particularly in LMIC where reliable access to safe intrapartum and postnatal care is not guaranteed, this must be weighed carefully against the potential risks of cesarean section. While access to safe cesarean section is an essential component of the WHO's Comprehensive Emergency Obstetric Care package, limited resources and lack of skilled healthcare providers mean that complications of cesarean section endanger women's lives to a far greater extent in LMIC than in HIC. Sobhy *et al.* recently published a systematic review and meta-analysis of maternal mortality rates in over 2 million cesarean sections performed in LMIC and demonstrated a mortality rate of 7.6 per 1000 women

undergoing cesarean section. This is almost 100 times higher than the equivalent figure in the United Kingdom. Women in sub-Saharan Africa were disproportionately at risk, with the highest rates observed in countries that have low baseline rates of cesarean section. The authors recommend that in cases of stillbirth, cesarean section should only be considered if delivery needs to be urgently expedited in order to prevent maternal complications (e.g. severe pre-eclampsia) or when there is an absolute obstetric contraindication to vaginal delivery (e.g. transverse fetal lie).⁵⁶

In HIC where cesarean section is comparatively safer and may appeal to parents, failure of staff to listen to, respect and consider parents' requests for cesarean birth can lead to distress, breakdown of trust, formal complaints and lasting trauma for parents (INSIGHT Study).⁷ However, sensitive and supportive counseling regarding vaginal birth, including detailed reassurance about the range of analgesia available and allowing time for parents to emotionally prepare themselves, can facilitate a natural birth that women can perceive as "dignified", "fortifying" and "an accomplishment".^{7,10,11,12} Involving parents in discussions and decisions about mode of birth and providing intensive one-to-one support during the process of labor and delivery is paramount.^{7,11}

Intrapartum care

Intrapartum care for women whose baby has died should be provided by a skilled, experienced birth attendant, with support of an obstetrician available if required. Basic management principles are the same as for labor in women with a healthy baby, including bladder care, use of a partogram and recognition of delayed or arrested progress. While provision of emotional support is vital in this setting, the fact that the baby has died should never eclipse the importance of high-quality obstetric care and the prevention of maternal morbidity. A recent detailed review of all perinatal deaths in the UK identified major failings in management of labor, including several cases in which the duration of labor was significantly in excess of the normal parameters.²⁶

All staff caring for mothers in these circumstances should be mindful that certain obstetric complications appear to more common when the baby has died: a Norwegian cohort study demonstrated an increased risk of shoulder dystocia, particularly in the presence of fetal macrosomia or maternal diabetes.⁵⁷ A large cross-sectional analysis in the USA corroborated this and also identified higher rates of chorioamnionitis, postpartum hemorrhage and retained placenta in women with stillbirth.⁵⁸ Stillbirth alone is not an indication for prophylactic antibiotics during labor, but women should be monitored closely for clinical signs of chorioamnionitis and broad-spectrum intravenous antibiotics should be started promptly for those who develop sepsis.

Pain relief and sedation during birth

Provision of adequate analgesia during labor is an essential component of care for women who have been diagnosed with stillbirth, and is often neglected: a systematic review by Gold *et al.* in 2007 found that pain relief is frequently inadequate during inpatient care following perinatal death.⁵⁹ All standard options for intrapartum pain relief should be made available to women whose baby has died, including regional anesthesia and patient-controlled opioid analgesia should be offered (if available). Early input from an obstetric anesthetist is valuable.²⁰ The UK's National Institute for Health and Care Excellence (NICE) recommends the following stepwise approach to intrapartum pain relief as detailed in Table 5.

Table 5 NICE guidelines for intrapartum pain relief⁶⁰

	Modality	Comments
1	Pain-relieving strategies	<ul style="list-style-type: none"> Support the use of breathing and relaxation techniques
2	Non-pharmacological and inhalational analgesia	<ul style="list-style-type: none"> Entonox (a 50 : 50 mixture of oxygen and nitrous oxide) should be offered in all settings Transcutaneous electrical nerve stimulation (TENS) should not be offered to women in established labor
3	Intravenous and	<p>Offer intravenous morphine or diamorphine, explain that these will provide transient pain relief.</p>

	intramuscular Modality opioids	Offer intramuscular pethidine or diamorphine: explain that these will provide transient pain relief and can lead to drowsiness, nausea and vomiting; consider administering an antiemetic, to minimize opioid-induced nausea
		<ul style="list-style-type: none"> • Offer intravenous patient-controlled opioid analgesia, if available
4	Regional analgesia	<ul style="list-style-type: none"> • Offer epidural analgesia early, including during the latent phase of labor, if available • Discuss the risks, benefits and monitoring requirements (e.g. intravenous access, regular monitoring of blood pressure and assessment of sensory block)

It is important to note that maternal DIC increases the risk of subdural or epidural hematoma with regional anesthesia, and these cases (including women with abruption) will require careful management with close input from anesthetics and hematology wherever possible.^{61,62}

The use of pharmacological sedation during birth for mothers whose baby has died is controversial. A survey of 1500 American obstetricians demonstrated that almost half of them support the use of benzodiazepine sedation for women in the immediate aftermath of perinatal death, despite the lack of any evidence in favor of benefit.⁶³ Given that mothers who are heavily sedated during labor with a stillborn child frequently report overwhelming regret at being unable to spend time with their baby after delivery,⁶⁴ Cochrane reviewers recommend that pharmacological management of the grief associated with stillbirth is only used where the mother has a pre-existing psychological problem for which medication is required.¹⁰

Seeing and holding the baby, and creation of memories

Consensus from studies in HIC is that bereaved parents appreciate the opportunity to see and hold their stillborn baby, although they will often require gentle repeated encouragement from staff in order to feel confident enough to do so.^{10,11,65} Activities that promote parental bonding include dressing the baby, using the baby's name, participating in religious or other ceremonies, introducing the baby to siblings and other relatives and having the opportunity to take photographs.¹⁰ Many healthcare facilities in HIC will also offer to create items of commemorative memorabilia such as handprints, footprints or particular items of clothing. The benefits of memory-making are strongly supported by a meta-analysis of hospital care for bereaved parents following perinatal death, and fathers in particular report appreciation for the care taken by staff in creating personal memorabilia.^{54,59} However, as discussed above, staff should not assume that these measures will be universally welcomed, as there is evidence that in some settings, particularly (but not exclusively) LMIC, the prospect of spending time with a stillborn baby may not be acceptable to some bereaved parents and could compound their distress.^{12,15}

Discussion of post-mortem

Many parents report feeling overwhelmed by the decisions they are asked to make following the physical and emotional trauma of the birth of their stillborn baby, particularly surrounding post-mortem and funeral arrangements. The process of offering and discussing a perinatal post-mortem examination must be handled sensitively by staff who have been trained to provide individualized counseling. Parents appreciate gradual "drip-feeding" of jargon-free information, reassurance that any investigations will be respectful and dignified, written information, and a clear explanation of the potential for post-mortem to identify a reason for the stillbirth that is tailored to the particular circumstances of their loss.⁷ There is some evidence that those who decline post-mortem are more likely to express regret over their decision than those who accept the offer of post-mortem,⁶⁶ although for those who do proceed with post-mortem the long wait for results can be particularly challenging.^{11,67}

Systematic reviews have repeatedly demonstrated that staff behavior has a profound influence on parents' decision whether to consent to post-mortem.^{6,11,12,68} This is reflected in national guidelines: in the UK, for example, the National Bereavement Care Pathway for stillbirth recommends that staff discussing perinatal post-mortem are fully trained to do so, allow a minimum of 1 hour for the conversation, and specifically discuss the likely timescales for the post-mortem results and the return of the baby's body.⁸

Thromboprophylaxis

Stillbirth is an independent risk factor for postpartum venous thromboembolism (VTE), leading to a six-fold increased risk compared to live births.⁶⁹ All women with stillbirth should therefore be carefully risk-assessed according to local thromboprophylaxis guidelines.²⁰ Given that stillbirth is frequently associated with other VTE risk factors such as higher maternal age, obesity and systemic infection, many women with stillbirth are likely to be eligible for postpartum VTE thromboprophylaxis.^{20,70,71} One caveat is in women with DIC, in whom the benefits of any medical thromboprophylaxis should be balanced carefully against the risk of hemorrhage – ideally, any such patients should be discussed with a hematologist.²⁰

Management of lactation

This is an important and often overlooked aspect of postnatal care for women whose baby has died, and international guidelines now advise that lactation suppression is discussed following all cases of stillbirth.²⁰ Qualitative analyses have demonstrated that many women do not anticipate the discomfort and distress that can result from breast engorgement in this context, and up to a third of women who use simple conservative measures (such as ice packs and analgesics) experience severe breast pain.⁷² Pharmacological suppression of lactation with dopamine agonists should therefore be offered. Either single-dose cabergoline (1 mg) or a course of bromocriptine (2.5 mg twice daily for 14 days) can be used: both proved similarly effective in a randomized controlled trial published in 1991, but the cabergoline regimen was simpler to use with fewer adverse events and lower rates of rebound lactational activity.⁷³

The only scenario in which dopamine agonists are contraindicated is maternal hypertension or pre-eclampsia, since they can lead to dangerously elevated blood pressure and have been associated with intracranial hemorrhage.⁷⁴ In this context, women should be advised to use simple conservative measures. Estrogen should not be offered for lactation suppression, as it has no proven efficacy and increases the risk of postpartum VTE.⁷⁵

Follow-up

As they transition from hospital to community care following a stillbirth, parents appreciate close liaison with primary care services, detailed information about postnatal recovery and the offer of ongoing contact with a named, trusted member of a specialist bereavement team. Staff should ensure that mothers have been offered lactation suppression and that both parents are aware that they are eligible for parental leave.^{64,76} Many studies have highlighted that bereaved parents can benefit significantly from participation in support groups or online forums, so staff should ensure that parents are aware of available resources before they leave hospital.^{11,77}

Parents also particularly value the opportunity to have a debriefing appointment with the obstetric team after a few weeks or months have elapsed, providing the purpose of the appointment is clear and they know what to expect from the discussion.^{7,11,64,78} These appointments should explore the physical and emotional well-being of the mother and family, explain the probable cause of the stillbirth (if known), and address the risk of recurrence. With parental consent, staff should also use this opportunity to discuss plans for any future pregnancy, including pre-conception counseling, management of modifiable risk factors such as maternal obesity, and any specific preventive measures indicated by the cause of the recent stillbirth. It is also important to acknowledge the increased risk of anxiety and depression for both parents in any subsequent pregnancy.⁷⁹

During follow-up appointments, parents appreciate the opportunity to revisit the events before and after the stillbirth. Reassurance from staff helps to reaffirm that the parents were not responsible for the baby's death and can improve parents' experience of their grief. Although parents resent the implication that they can somehow replace or atone for the baby who has died by having another child, they appreciate the offer of more intensive or specialized antenatal care during any subsequent pregnancy.^{7,11,78,80}

Care for fathers

All the literature on care for bereaved parents after a stillbirth emphasizes that mothers and fathers may respond differently to the loss of their baby.^{6,11,12,81} Although rates of anxiety and depression are higher in mothers, fathers are

more likely to suppress their grief, which may place them at higher risk of post-traumatic stress disorder or substance misuse.^{6,81} They may focus on practical matters in an attempt to protect or insulate their partner from the challenges of daily life after a stillbirth; this is exacerbated by the tendency of healthcare providers and society as a whole to fail to acknowledge or legitimize fathers' grief.^{6,11,81} In their meta-summary, Burden *et al.* emphasized that financial difficulties were particularly prominent in fathers in LMIC, suggesting that better public education (particularly for employers) might be beneficial; but despite the growing evidence that fathers have specific requirements during bereavement care after a stillbirth, there are very few data demonstrating how best to tailor care to their needs.^{6,10}

Culturally sensitive care

The authors cited in this chapter universally recognise that any improvements in care for bereaved parents will need to acknowledge deeply embedded cultural beliefs, practices and misconceptions surrounding stillbirth, as well as local resource constraints.⁶ Although the importance of cultural factors in the response to loss and grief in adults is well-documented, there has been minimal formal investigation of their effects in the field of perinatal loss.¹⁰ A series published in *Seminars in Fetal and Neonatal Medicine* in 2008 offered various religious perspectives on fetal and neonatal care, and encouraged further research into implications of cultural factors on stillbirth.^{82,83} A study (Siassakos *et al.*, unpublished) of 12 religious leaders with experience of bereavement support showed that there are different perspectives even within specific religions; we cannot predict what will be culturally appropriate for individual parents unless we consult with them and their families. Providing written information in different languages, offering culturally appropriate and individually relevant psychological support, as well as referring parents to hospital chaplaincy services may all be beneficial according to individual circumstances.^{10,12}

SUPPORT AND TRAINING FOR STAFF INVOLVED IN PERINATAL BEREAVEMENT CARE

A systematic review of 20 studies investigating the effects of stillbirth on healthcare providers concluded that there are substantial negative psychological implications for staff, including anxiety, guilt, sadness and fear of litigation. Conversely, caring for bereaved parents can also be deeply rewarding for staff, some of whom described a sense of privilege and honor in being able to positively influence parents' experiences in a time of acute distress. Thirteen studies stressed the need for enhanced professional support for staff, although the majority acknowledged that peer support was usually informal owing to an absence of formal institutional structures. Crucially, staff who felt they had received sufficient training in bereavement care for parents with a stillborn baby reported lower rates of guilt and fear of litigation.⁵

The inconsistencies in perinatal bereavement care reflect the complete lack of comprehensive programs designed to train and support staff in the provision of high-quality care for parents after a stillbirth.^{5,7} This is detrimental to both parents and staff: a survey of over 2000 staff in the UK demonstrated that 1 in 3 felt they had not received sufficient training in how to counsel parents after stillbirth, and parents have described their interactions with staff as clumsy and insensitive with partners frequently overlooked.^{20,26,68}

Suggested priorities for staff training include:⁷

1. Incorporating a brief, standardized discussion of stillbirth into routine antenatal care, along with education for parents about warning signs such as reduced fetal movements.
2. Ensuring that all doctors, particularly those who work out-of-hours, receive practical training in confirmation of fetal death on ultrasound, in order to avoid ambiguity and delays for parents.
3. Ensuring that all staff involved in antenatal and intrapartum care, even those outside the direct obstetric team (e.g. ultrasonographers, general practitioners, health visitors) receive formal training in the principles of respectful maternity care and in the communication skills that would enable them to sensitively discuss the diagnosis of stillbirth.
4. Embedding complex non-technical skills into staff training, focusing on the ability to provide respectful and culturally appropriate care and counseling, provide information that is easy for parents to understand and involve parents in shared decision-making where appropriate.
5. Acknowledging that parents need staff to focus on the baby that has died, rather than inadvertently belittling their loss

by attempting to console them with the prospect of another pregnancy.

CONCLUSION

Stillbirth is a stigmatized, under-appreciated and under-funded public health problem associated with a constellation of negative medical, psychological and socioeconomic consequences for bereaved parents, extended families and healthcare providers. If *The Lancet's* call for a "global consensus on a package of care after death in pregnancy or childbirth... by 2020"³ is to be answered, further research across a diverse range of cultural, religious and economic contexts is urgently required to determine how the themes discussed above can be translated into comprehensive, high-quality bereavement care. With the vast majority of stillbirths concentrated in LMIC, efforts to eliminate the associated stigma and taboo in these societies must be prioritized. Certain vulnerable groups, including women with pre-existing mental health problems, those with the highest levels of social deprivation and those who choose to terminate a pregnancy due to fetal abnormalities are likely to have specific needs that are yet to be fully elucidated by current research.^{3,7,84}

Although many unanswered questions remain, there are certain interventions that do not require significant investment but have the potential to enhance perinatal bereavement care across the globe: implementation of the respectful maternity care agenda,¹⁸ involving parents in discussions about mode of birth, judicious use of analgesia during labor and delivery, considerate postnatal care, and promoting support by family and community members.¹² Efforts to reduce preventable stillbirth and minimize long-term trauma for parents and staff who do experience it should be treated as a global health imperative and incorporated into international political agendas. High-quality care for bereaved parents after a stillbirth should be a universal right, not a minority privilege.

RELEVANT CURRENT GUIDELINES, STATEMENTS AND POLICIES OF PROFESSIONAL ASSOCIATIONS

Authoring group or institution	Year of publication	Title
Royal College of Obstetricians and Gynaecologists (UK)	2010	Late intrauterine fetal death and stillbirth. Green-top guideline No. 55 ²⁰
World Health Organization	2014	The prevention and elimination of disrespect and abuse during facility-based childbirth ¹⁸
NHS England	2016	Better births. Improving outcomes of maternity services in England: a five year forward view for maternity care ⁸⁵
<i>The Lancet</i>	2016	Ending preventable stillbirths: an executive summary for <i>The Lancet's</i> series ⁸⁶
World Health Organization	2017	Every Newborn Action Plan: Reaching the Every Newborn National 2020 Milestones ⁸⁷
National Bereavement Care Pathway (UK)	2019	National Bereavement Care Pathway for pregnancy and baby loss. Stillbirth: full guidance document ⁸

PRACTICE RECOMMENDATIONS

- **Respectful maternity care:** All healthcare providers caring for women who have been diagnosed with a stillbirth should provide respectful maternity care that preserves dignity, confidentiality and patient choice.
- **Making and communicating the diagnosis:** Stillbirth should be confirmed with direct ultrasound of the fetal heart by a skilled operator. The diagnosis should then be communicated clearly to both parents in a private place using simple language, with straightforward expressions of empathy and reassurance.
- **Investigations:** Laboratory investigations should be conducted in all women diagnosed with stillbirth, to evaluate maternal well-being and help determine the cause of fetal death. These should include maternal blood for hematology, biochemistry, inflammatory markers, viral serology, coagulation profile, Kleihauer and random blood glucose. Additional tests such as thrombophilia screen and maternal autoantibodies should be offered if available.
- **Timing of birth:** The majority of women who have been diagnosed with stillbirth will wish to proceed with delivery of the baby within the next 48 hours. Those who wish to delay delivery should be counseled that there is a 10% risk of developing disseminated intravascular coagulation (DIC) within the first 4 weeks. Delivery should be expedited urgently in the presence of ruptured membranes, placental abruption, sepsis or pre-eclampsia, in order to avoid serious maternal complications.
- **Mode of birth:** A new birth plan should be discussed with bereaved parents. Vaginal birth is the safest option in most circumstances, but cesarean section may occasionally be indicated and healthcare providers should acknowledge parents' concerns and preferences regarding mode of delivery in settings where it is available and safe. FIGO has published guidelines for preferred method of induction of labor according to gestational age and obstetric history. In women with no history of previous cesarean section, the recommended method is single-dose oral mifepristone followed by a scheduled regimen of vaginal or oral misoprostol.
- **Intrapartum and postnatal care:** Women should receive high-quality intrapartum care, including use of a partogram to monitor progress in labor and provision of adequate analgesia. Staff should be vigilant for signs of the obstetric complications associated with stillbirth, including chorioamnionitis and shoulder dystocia. Prophylactic antibiotics in labor are not routinely indicated, unless there are signs of infection. After delivery, women should receive cabergoline 1 mg for lactation suppression and should be assessed for risk of venous thromboembolism, with prophylaxis provided if necessary.
- **Perinatal post-mortem examination:** The discussion of perinatal post-mortem examination should be conducted in a private place and led by a trained staff member who has allocated adequate time for the conversation. Parents should be counseled on the likelihood of identifying a cause of death, but also of excluding known recurrent causes, and reassured that dignity is preserved during all investigations.
- **Support and training for staff providing perinatal bereavement care:** Institutions should recognise that caring for bereaved parents can be highly rewarding for healthcare staff, but that it can also lead to feelings of anxiety, guilt and fear of litigation. Staff should receive standardized training in perinatal bereavement care, including the importance of non-technical skills, and should be able to access dedicated professional support.

CONFLICTS OF INTEREST

Emily Cornish declares that she has no interests that conflict with the contents of the chapter.

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