

Mapping perinatal bereavement care education and training for maternity staff

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Abstract

Aim

To establish, for the 19 maternity hospitals and units in the Republic of Ireland, the extent and nature of the provision of education and training opportunities for staff on perinatal bereavement care and implementation influences.

Methods

We administered a purposefully designed survey electronically to identified staff in each of the 19 maternity hospitals and units, December 2023-February 2024. We sought details of education and training opportunities provided and implementation issues. Data regarding the former were analysed quantitatively. Conventional qualitative content analysis of select questions was undertaken to analyse implementation influences; findings were mapped to the Consolidated Framework for Implementation Research (CFIR).

Results

17 of the 19 maternity hospitals or units detailed education and training programmes offered. Most provided one education or training programme (n=10). Programmes offered were primarily bespoke study days or information sessions. Implementation barriers and facilitators mapped onto 26/67 CFIR constructs and sub-constructs: (1) Innovation (4/8); (2) Outer setting (3/10); (3) Inner setting (6/21); (4) Individuals (8/13); (5) Implementation process (5/15).

Discussion

Our study highlights the lack of standardisation of perinatal bereavement care education and training programmes. It also identifies factors that influence their implementation which can be harnessed in developing, implementing or scaling-up programmes nationally.

Introduction

Pregnancy loss and perinatal death (herein referred to as perinatal loss) are distressing and often traumatic events. Bereavement care and interactions with staff after perinatal loss have profound, long lasting effects on grief experienced,^{1–3} which poor bereavement care can magnify.^{4,5} The need for better bereavement care is a recurrent theme in studies of lived experiences of perinatal loss.^{2,4,6–8} Healthcare professionals themselves also express a need for training.^{1,9,10} The RESPECT study identified the core principles for global bereavement care after stillbirth; staff training was a top-ranked priority.¹¹ This is echoed in national guidelines worldwide,¹² including in the National Standards for Bereavement Care following Pregnancy Loss and Perinatal Death in the Republic of Ireland (ROI).¹³

Education and training programmes for perinatal bereavement care have been developed and implemented internationally; e.g. the IMPROVE¹⁴ and TEARDROP¹⁰ workshops, among others.^{15,16} An audit of perinatal bereavement care in the 19 maternity hospitals and units across the ROI, in 2017 and again in 2020, identified some education initiatives in operation; but limited details were sought, focusing on the types and frequency of programmes provided and by whom, staff attendance and funding.¹⁷ There is a gap in knowledge in terms of what education and training is provided within and across maternity hospitals and units nationally and associated implementation issues.

In this study, we aimed to establish, for the 19 maternity hospitals and units in the ROI: (i) the extent and nature of the provision of education and training programmes on perinatal bereavement care and (ii) factors that influence the implementation of such programmes. Findings from this study will be used to inform efforts to enhance the implementation of the National Standards for Bereavement Care for Pregnancy Loss and Perinatal Death, including opportunities to scale up programmes nationally.

Methods

The Clinical Research Ethics Committee of the Cork Teaching Hospitals granted ethical approval for this study (ref ECM4(u)24/10/2023).

To achieve our stated aims we conducted an online qualitative survey of staff education/training programmes in maternity hospitals or units in the ROI. Throughout the paper, we use the term ‘respondents’ when referring to survey participants, to avoid any confusion with ‘participants’ who take part in the education or training programmes documented by ‘respondents’. Qualitative surveys give respondents control regarding their participation and are generally less burdensome than in-person interviews as respondents can complete them at a time, and in a location, that suits them; they also negate the need for transcription.^{18,19} They do however lack the flexibility of qualitative interviews, including the opportunity to prompt and probe respondents. Qualitative survey data can be “thin”; however, well designed and conducted studies demonstrate that respondents can provide detailed, rich responses.¹⁹

We developed the survey instrument around the audit tool for the National Standards for Bereavement Care following Pregnancy Loss and Perinatal Death, supplemented with questions adapted from behavioural and implementation science frameworks such as the RE-AIM (Reach, Effectiveness-Adoption, Implementation, Maintenance) and TIDIER (Template for intervention description and replication) frameworks^{20,21} and following methodological guidance.¹⁸ The survey, hosted on Qualtrics, comprised primarily open-ended questions, divided into four sections: (i) About you and your maternity hospital or unit; (ii) Staff education and training on bereavement care; (iii) Staff supports [these are the focus of a separate study and will be reported elsewhere]; (iv) Any other comments. We provided space for respondents to detail information for up to eight education and training programmes, with the option to email us with further information. Survey questions were discussed with members of the Pregnancy Loss Research Group, National Women and Infants Health Programme (NWIHP), and the advisory group for the implementation of the national standards, some of whom also piloted the survey before it was finalised. The survey is available in Supplementary File 1.

Prior to recruitment, the study sponsors, the NWIHP, sent a letter to each of the 19 maternity hospitals or units (details in Supplementary File 2)²² advising them that the study was taking place. The research team then emailed the Clinical Leads for Pregnancy Loss and Directors of Midwifery or Nursing (DOM) within each of the 19 sites, inviting them, or a nominated

representative, to take part in the study. Information about the study and a link to the online survey were provided. The Clinical Midwife or Nurse Specialist in Bereavement and Loss (CMS-BL) was copied to ensure that they were aware of the study. Respondents were also given the opportunity to complete the survey via virtual, telephone or in-person interview (i.e. interviewer-administered). They were advised that participation was voluntary, all data would remain confidential and the reporting of findings would not identify individual respondents and/or their hospital. We stressed that our aim was to establish what education and training and supports were provided nationally, not to evaluate practices within individual hospitals and/or by individuals. Respondents provided informed consent before undertaking the survey. This involved ticking a box to confirm their understanding of the study conditions and their agreement to participate. They were then directed to the beginning of the survey. Reminders to complete the survey (via email, telephone, SMS), were issued where appropriate. The survey was estimated to take 45-60 minutes to complete; this varied depending on the level of detail provided by respondents. Surveys were considered completed when respondents clicked the 'submit' button.

Survey data was downloaded from Qualtrics into Microsoft Excel, cleaned and pseudo-anonymised prior to analysis. Data, which were primarily textual or qualitative, were analysed quantitatively for questions regarding programme characteristics. Responses were coded into explicit categories generated from the data, and frequencies reported. We did not use qualitative content analysis as we were reporting specific aspects of education and training programmes, not meaning attributed to them.²³ We did; however, use conventional qualitative content analysis to analyse specific questions which provided opportunity for more detailed responses (see Supplementary File 3)²². This part of the analysis was undertaken within NVivo software to facilitate data management. We coded and generated themes from the data and mapped these to constructs within the Consolidated Framework for Implementation Research (CFIR).²⁴ This enabled us to better understand influences on implementation, with a view to selecting and tailoring future implementation strategies. Members of the research team engaged in reflexivity throughout the study.

Results

We received at least one completed survey response from each of the 19 maternity hospitals and units by the closing date (05/12/2023 to 05/02/2024). All respondents self-completed the online survey. After data checks were completed, we included 22 survey responses in our analysis. Respondents self-identified as CMS-BL, including anyone acting in this role (n=14), (A)DOM (n=5), CMS-BL and ADOM (n=1), Consultant Obstetrician/Gynaecologist (n=1) and Midwifery Clinical Skills Facilitator (n=1). Anecdotally we know that some responses were prepared by a team and submitted by one person on behalf of their maternity hospital or unit. The CMS-BL, Consultant Obstetrician/Gynaecologist and Midwifery Clinical Skills Facilitator stated that their role involved the delivery of education and training, while (A)DOM stated that their role primarily involved ensuring that educational opportunities are provided, and that staff are facilitated to attend these.

Education and training programmes provided – structural details

Seventeen of the 19 maternity hospitals and units provided details of education and training programmes they provided (see Table 1). Two (one maternity hospital and one maternity unit; different hospital groups) did not provide any education or training at the time of survey completion, noting that they had plans to hold such training following the cancellation of training due to the COVID-19 pandemic. One of these sites also noted that they provide ‘unofficial’ teaching on wards.

Overall, details of 26 education and training programmes were documented by respondents. Over half of hospitals and units provided one education or training programme (n=10/19, 53%), while five provided two programmes (26%), and two provided three different programmes (11%). In terms of specific programmes offered, the terms used to describe offerings varied. Most were categorised as workshops or training programmes (n=12, 63%) or study days (n=7, 37%). The former included the Irish Hospice Foundation (IHF) Dealing with Loss in Maternity Settings programme (n=4) and TEARDROP workshops (n=2), the remainder were bespoke workshops or training programmes developed locally or regionally (n=6).

Respondents stated that people with lived experience were involved in programme development and/or delivery in 12/19 hospitals and units (64%).

Various types of staff were the target(s) of programmes, predominantly midwives (n=14; 54%), nurses (n=9, 35%), students (n=7, 27%), and healthcare assistants (n=6, 23%). Eight programmes (31%) targeted 'all staff'. Most programmes were provided locally (within hospital or unit) only (n=12, 46%) or locally and regionally (n=7, 27%). The majority of programmes were offered or provided by a Centre of Nursing and Midwifery Education (CNME) and/or hospital staff. Attendance at almost two-thirds of programmes was not mandatory (n=16, 62%). CMS-BL/midwives (including lactation consultant) were the most common category of education and training programme provider or facilitator (n=23; 88%). Most programmes were delivered in-person (n=19, 73%) and provided on-site (n=17, 65%).

Table 1: Details of education and training programmes provided by the 19 maternity hospitals and units - structural

	Categories	N	%
No. of programmes provided by site (N=19)	0	2	11
	1	10	53
	2	5	26
	3	2	11
Type of programmes provided by each site (N=19)^a	Drop-in information session or stand (one component of broader maternity programme)	1	5
	Education session or didactic	2	11
	Induction training	2	11
	Mini/digital training sessions	2	11
	Study day(s) ^b	7	37
	Workshop or Training programme	12	63
	IHF Dealing with Loss in Maternity Settings	4	33
	TEARDROP workshop	2	17
	Other (bespoke workshop or training programme)	6	50
People with lived experience of pregnancy loss or perinatal death involved in programme	None	2	11
	Yes, involved in development	1	5
	Yes, involved in delivery	6	32
	Yes, involved in delivery and development	3	16
	Yes, level of involvement not specified	2	11
	No	6	32

development and/or delivery (N=19)	Not stated	1	5
Target audience of the programmes provided, by staff category (N=26)^a	All staff (sole response)	8	31
	Allied health professionals	2	8
	Doctors	5	19
	Healthcare assistants	6	23
	Midwives	14	54
	Mortuary technicians	1	4
	Multi-Disciplinary Team (MDT)	2	8
	Nurses	9	35
	Pathology	1	4
	Public health nurses	4	15
	Neonatal unit staff (nurses only)	1	4
	Students Student nurses and/or midwives (1); Student midwives-BSc or HDip (2); Not specified (4)	7	27
	Theatre staff	1	4
Programme provided locally, regionally and/or nationally: (N=26)	Locally (within hospital or unit) only	12	46
	Regionally (within hospital group or other geographic area) only	3	12
	Locally and regionally	7	27
	Locally and nationally	1	4
	Locally, regionally and nationally	1	4
	Regionally and other (Module on HSELand on bereavement)	1	4
	Other (private company)	1	4
Programme provided and/or offered by: (N=26)^a	CNME	8	31
	CNME; Another charity-Féileacáin; Other-Nursing and Midwifery Board of Ireland (NMBI)	1	4
	CNME; Hospital staff	3	12
	CNME; IHF	1	4
	CNME; Nursing and Midwifery Planning and Development Unit (NMPDU); Royal College of Physicians of Ireland (RCPI)	1	4
	CNME; Other, NMBI Continuing Education Unit (CEU's)	1	4
	CNME; RCPI	1	4
	Hospital staff	6	23
	Hospital staff; Other (University)	1	4
	Hospital staff; IHF	1	4
	NMPDU	1	4
	Other (Private company)	1	4
	No	16	62

Mandatory for staff to attend programme (N=26)	Yes	10	38
Who facilitates or delivers this programme, by provider type (N=26) ^a	CMS-BL and/or midwives (including lactation consultant) Note: All 23 programmes involved CMS-BL	23	88
	OBGYN or doctors	4	15
	Pathologist or pathology team (including medical scientists)	5	19
	Pastoral care, social workers, PMH psychologist or midwife	5	19
	Bereaved parents or support organisation	6	23
	CNME or clinical skills tutors	3	12
	Lecturers	2	8
	External provider or speaker(s)	2	8
	Others: Mortician (1); Quality and Patient Safety (QPS) staff (1)	2	8
	Not specified (own staff; expert clinical personnel; experts or experienced educators and clinicians)	3	12
How programme is delivered (N=26)	At a distance, virtual, or online	3	12
	Hybrid	4	15
	In-person or Face-to-face	19	73
Where programme delivered (N=26)	Off-site (all CNME)	5	19
	On-site	17	65
	Online (other, on-site and/or off-site, not stated)	3	12
	Not stated	1	4

^a More than one category could have been coded to respondents' answers; percentages may not add to 100.

^b Bereavement (2); Bereavement care (2); Perinatal bereavement (1); Early pregnancy and ectopic (1); Pregnancy and infant loss (1)

Education and training programmes provided – programme content and delivery

See Table 2 for details regarding programme content and delivery. Topics covered varied: most frequently identified categories included 'communication, breaking bad news' (n=16, 62%), 'self-care; supports, support services-staff' (n=12, 46%), 'postmortems, perinatal pathology' (n=11, 42%) and 'memory-making' (n=10, 38%). Most programmes involved didactic and interactive teaching and learning (n=16, 62%) and were 5-6 hours (n=6, 23%) or a full day (n=13, 50%) in duration.

Programmes were delivered on a once-off basis (n=15, 58%) or recurring basis (n=11, 42%). Almost two-thirds of programmes (n=17, 65%) did not involve costs, according to respondents. Staff were facilitated to attend programmes in various ways, most commonly released on a working day to attend solely or in combination with other methods (n=19, 73%). Respondents stated that 16 programmes were accredited (62%); primarily by CNME or CME – solely (n=6, 38%), or in conjunction with the NMBI (n=5, 31%) or NMBI and RCPI (n=2, 13%). Almost two-thirds of programmes required a minimum and/or maximum number of participants to run (n=17, 65%); ranging from 5 to 42. The frequency of reviews and updates was most commonly annually (n=8, 31%) or before or after each session (n=6, 23%). Respondents stated that changes were made to 15 programmes (58%) following such reviews. Additional details on programmes are available in Supplementary File 4.²²

Table 2 : Details of education and training programmes provided by the 19 maternity hospitals or units – programme and implementation features

	Categories	N	%
Overview of topics covered in programme (N=26)^a	Bereavement care	9	35
	Bereavement, bereavement care pathways	2	8
	Bereavement standards, updates	7	27
	Care in labour	2	8
	Clinical guidelines, updates	2	8
	Communication, Breaking bad news	16	62
	Cuddle cot	3	12
	Cytogenetic testing or fetal tissue	3	12
	Documentation: pathways and/or referrals; patient information booklets or leaflets	4	15
	Early pregnancy loss	4	15
	Ectopic pregnancy	1	4
	Fatal fetal anomaly	2	8
	Follow-up care	2	8
	Grief, theories of grief	8	31
	Lactation support	4	15
	Memory-making	10	38
	Miscarriage	2	8
	Molar pregnancy	1	4
	Neonatal death	2	8
	Perinatal hospice, palliative care	4	15
	Perinatal mental health	2	8
	Postmortems, perinatal pathology	11	42
	Pregnancy after loss	1	4
	Pregnancy loss (unspecified)	9	35
	Risk factors, audit, reporting	1	4
	Role of the CMS-BL	3	12
	Role of the Coroner	1	4
	Second trimester loss	3	12
	Self-care; Supports, support services-staff	12	46
	Siblings	1	4
	Spiritual, religious and cultural aspects of early pregnancy loss	1	4
	Stillbirth	3	12
	Supports, support services-bereaved families	8	31
	Termination of pregnancy	2	8
	Not stated	1	4
Overview of the teaching & learning	Didactic only	4	15
	Interactive only	4	15

strategies used in programme (N=26)	Didactic and interactive	16	62
	Not stated	2	8
Duration of programme (N=26)	One hour or less	4	15
	20 minutes	1	4
	40 minutes	1	4
	1 hour	2	8
	3 to 4 hours	2	8
	3 hours	1	4
	4 hours (half day)	1	4
	5 to 6 hours	6	23
	5 hours	2	8
	6 hours	4	15
Once-off programme for staff, or recurring (e.g. with refresher sessions) (N=26)	7-8.5 hours (one full day)	13	50
	Not stated	1	4
Costs associated with the provision of this programme (e.g. financial, in-kind) (N=26)^a	Once-off	15	58
	Recurring	11	42
How staff are facilitated to attend programme(s) (N=26)^a	None	17	65
	Catering (3) or room (1) costs	3	12
	Speaker fees	1	4
	Staff time (including time off work; backfill of staff); travel costs	3	12
	Not stated	2	8
Accredited programme (N=26)	Attend on a day off, given time off in lieu	14	54
	Attend on a day off, paid	9	35
	Paid to attend	8	31
	Released on a working day to attend	19	73
Minimum and/or maximum no. of participants needed to run programme (N=26)	Yes	16	62
	CNME or CME	6	38
	CNME or CME; NMBI	5	31
	CNME or CME; NMBI; RCPI	2	13
	Other: (i) University, (ii) IHF, (iii) Unsure	3	19
	No	8	31
	Not stated	2	8
Frequency of content or format reviews or updates (N=26)	Yes	17	65
	No	7	27
	Unsure	2	8
Frequency of content or format reviews or updates (N=26)	After each session	2	8
	Annually	8	31
	Before each session	4	15

	Continuously (as policies, practices or knowledge base are updated)	4	15
	Currently under review	3	12
	N/A, not updated yet	1	4
	Unclear or unsure	2	8
	Not stated	2	8
Any changes made (N=26)	Yes ^b	15	58
	No	5	19
	Not stated	6	23

^a More than one category could have been coded to respondents' answers; percentages may not add to 100.

^b Updates based on guidelines, policies and/or research (n=8); change of speakers (n=1); added input of perinatal pathologist and focus on importance of communication (n=1); Pathologist's presentation & use of work stations with regard to memory making, cuddle cot & info on support group (n=1); from the change in the coroners Bill in relation to reporting stillbirths, memory making (n=1); content and length of talks (n=1); non-specified updates or not stated (n=2).

Factors influencing the implementation of education and training programmes

Barriers and facilitators to the implementation of education and training programmes were mapped onto 26 of the 67 constructs or sub-constructs in the five domains of the CFIR: (1) Innovation (4/8); (2) Outer setting (3/10); (3) Inner setting (6/21); (4) Individuals (8/13); (5) Implementation process (5/15) (see Table 3). The most frequently cited barriers were mapped onto the innovation recipients construct within the implementation process domain. Within the inner setting domain, work infrastructure was also a frequently cited barrier to implementation. The most frequently cited implementation facilitators were mapped onto the innovation domain, namely innovation source and innovation design constructs.

Table 3: Factors influencing the implementation of education or training programmes

Construct name	Implementation facilitators and/or barriers
I. Innovation domain: Education and training programmes for maternity staff to support bereavement care following pregnancy loss and perinatal death	
A. Innovation Source	<i>Implementation facilitators</i> <ul style="list-style-type: none"> Developed programme based on research, clinical practice, national guidelines and/or standards, lived experience (8 respondents, 7 sites, 5 groups) Sourced or developed via C(N)ME and/or bereavement midwife (6 respondents, 6 sites, 4 groups) Adopted or adapted existing reputable programme (5 respondents, 5 sites, 5 groups)
C. Innovation Relative Advantage	<i>Implementation facilitators</i> <ul style="list-style-type: none"> Formal, accredited training – established programmes (6 respondents, 5 sites, 4 groups)
D. Innovation Adaptability	<i>Implementation barriers</i> <ul style="list-style-type: none"> Challenges with hybrid delivery (1 respondent, 1 site, 1 group) In-person better than virtual (1 respondent, 1 site, 1 group)
G. Innovation Design	<i>Implementation facilitators</i> <ul style="list-style-type: none"> Engaging, interactive, accessible content (6 respondents, 6 sites, 3 groups) Succinct, short sessions or duration (6 respondents, 6 sites, 4 groups) Importance of lived experience input (4 respondents, 4 sites, 3 groups) Regularly scheduled programmes (2 respondents, 2 sites, 2 groups) Longer session to cover all aspects of bereavement and loss (1 respondent, 1 site, 1 group)
II. Outer Setting domain: Can include the affiliated general hospital and hospital group (for maternity hospitals or units), as well as the health service more broadly	
A. Critical Incidents	<i>Implementation barriers</i> <ul style="list-style-type: none"> Education or training ceased during COVID-19 pandemic – some were implemented again, others not, or to a lesser extent (4 respondents, 4 sites, 3 groups)
D. Partnerships & Connections	<i>Implementation facilitators</i> <ul style="list-style-type: none"> Collaboration with CNMEs to develop and/or implement programmes (8 respondents, 8 sites, 4 groups) Collaboration with support organisations (6 respondents, 6 sites, 4 groups) Collaboration with universities (1 respondent, 1 site, 1 group)
E. Policies & Laws	<i>Implementation facilitators</i> <ul style="list-style-type: none"> National Standards for Bereavement Care following Pregnancy Loss and Perinatal Death (1 respondent, 1 site, 1 group)
III. Inner Setting domain: Maternity hospital or unit	
A. Structural Characteristics	-

A3. Work Infrastructure	<i>Implementation barriers</i> <ul style="list-style-type: none"> Staffing issues or shortages (7 respondents, 7 sites, 5 groups)
B. Relational Connections	<i>Implementation facilitators</i> <ul style="list-style-type: none"> Bringing training or support to where people are (1 respondent, 1 site, 1 group)
F. Compatibility	<i>Implementation facilitators</i> <ul style="list-style-type: none"> Online offering enhances access & uptake (3 respondents, 3 sites, 3 groups)
H. Incentive Systems	<i>Implementation facilitators</i> <ul style="list-style-type: none"> Time off for, release of, or paying staff to attend enhances uptake (8 respondents, 7 sites, 5 groups) Making it mandatory (5 respondents, 5 sites, 4 groups) Formal, accredited training (3 respondents, 3 sites, 2 groups) Food provision can encourage attendance (1 respondent, 1 site, 1 group)
J. Available Resources	-
J2. Space	<i>Implementation facilitators</i> <ul style="list-style-type: none"> Availability of or access to appropriate physical space for intervention delivery (2 respondents, 2 sites, 2 groups) <i>Implementation barriers</i> <ul style="list-style-type: none"> Lack of availability or access to appropriate physical space to deliver education or training programme (3 respondents, 3 sites, 3 groups)
K. Access to Knowledge & Information	<i>Implementation barriers</i> <ul style="list-style-type: none"> Need access to training to implement and deliver specific education or training programme (3 respondents, 3 sites, 3 groups)
IV. Individuals domain	
Roles subdomain	
A. High-level Leaders	(A)DOMs [Inner and/or Outer Setting]
E. Implementation Leads	Varies by programme: From survey responses, would appear to be CMS-B&L, (A)DOMs and others involved in Bereavement Committees within each of the maternity hospitals or units [Inner Setting]
F. Implementation Team Members	Varies by programme: Can include Innovation Deliverers and others, e.g. staff from Centres for Nursing and Midwifery Education, Irish Hospice Foundation [Inner and/or Outer Setting]
H. Innovation Deliverers	Varies by programme: Can include staff working in maternity units/hospitals (mostly CMS-B&L or midwives – on their own and/or with other staff) and universities, as well as external providers [Inner and/or Outer Setting]
I. Innovation Recipients	Varies by programme: Staff working in maternity units/hospitals Foundation [Inner and/or Outer Setting]
Characteristics subdomain	
B. Capability	<u>Innovation Deliverers:</u> <i>Implementation barriers</i> <ul style="list-style-type: none"> Lack of sufficiently trained people to deliver programme (4 respondents, 4 sites, 3 groups)

C. Opportunity	<p><u>Innovation Deliverers/Implementation Leads:</u> <i>Implementation facilitators</i></p> <ul style="list-style-type: none"> • Dedicated role or person needed (3 respondents, 3 sites, 2 groups) <p><i>Implementation barriers</i></p> <ul style="list-style-type: none"> • Lack of time in role to deliver training (3 respondents, 3 sites, 3 groups) <p><u>Innovation Recipients:</u> <i>Implementation facilitators</i></p> <ul style="list-style-type: none"> • Access to Training - Location (2 respondents, 2 sites, 2 groups)
D. Motivation	<p><u>Innovation Deliverers/Implementation Facilitators:</u> <i>Implementation facilitators</i></p> <ul style="list-style-type: none"> • Interest or commitment from senior personnel or MDT to deliver and/or implement the programme (2 respondents, 2 sites, 1 group) <p><u>Innovation Recipients:</u> <i>Implementation facilitators</i></p> <ul style="list-style-type: none"> • Staff with an interest attend (1 respondent, 1 site, 1 group) <p><u>High-level leaders:</u> <i>Implementation facilitators</i></p> <ul style="list-style-type: none"> • Prioritised at senior management level (1 respondent, 1 site, 1 group)
V. Implementation Process domain: The activities and strategies used to implement the education/training programme	
B. Assessing Needs	-
B2. Innovation Recipients	<p><i>Implementation facilitators</i></p> <ul style="list-style-type: none"> • Programme developed based on needs (2 respondents, 2 sites, 2 groups) • Importance of assessing needs (1 respondent, 1 site, 1 group)
F. Engaging	-
F2. Innovation Recipients	<p><i>Implementation barriers</i></p> <ul style="list-style-type: none"> • Difficulty engaging certain types of innovation recipients who engage less often or not at all (e.g. doctors, all staff – not just midwives) (14 respondents, 13 sites, 5 groups) • Limits to eligibility - potential to extend training to others (5 respondents, 5 sites, 4 groups)
H. Reflecting & Evaluating	-
H1. Implementation	<p><i>Implementation facilitators</i></p> <ul style="list-style-type: none"> • Collect and discuss data on attendance numbers – fidelity / uptake (3 respondents, 3 sites, 2 groups)
H2. Innovation	<p><i>Implementation facilitators</i></p> <ul style="list-style-type: none"> • Feedback gathered and discussed (5 respondents, 5 sites, 3 groups) • Programme is positively received or evaluated (9 respondents, 9 sites, 6 groups)
I. Adapting	<p><i>Implementation facilitators</i></p> <ul style="list-style-type: none"> • Feedback informs changes (5 respondents, 5 sites, 3 groups) • Programme needs to be reviewed and updated to enhance implementation (1 respondent, 1 site, 1 group)

Note: Explanations and supporting information (including quotes) for each of the constructs (by facilitators and barriers) are available in Supplementary File 5.²² For brevity, we have excluded constructs (and barriers/facilitators for constructs shown, where applicable) for which there was 'no data', i.e. no data from respondents were coded to a construct.

Discussion

In this study, we mapped the extent and nature of perinatal bereavement care education and training programmes, and factors that influence the implementation of such programmes, in the 19 maternity hospitals and units in the ROI. While 17 sites provided at least one form of education or training programme, usually as an in-person workshop or training programme or study day, there was variation in provision. There is opportunity to build on positive elements of programmes and practices, such as scaling up some programmes nationally, supporting CMS-BL in their roles as identified programme deliverers and implementation facilitators, and building on partnerships and collaborations such as those with C(N)MEs and between different hospitals and hospital groups. The latter is particularly relevant given the reorganisation of hospital groups and formation of new health regions in 2024; efforts should be made to continue to foster collaborative education and training activities.

Enhancing the uptake of programmes amongst different categories of staff was highlighted as a key opportunity. As noted by respondents, online and/or shorter programmes may be needed to engage particular staff. This aligns with the “All, Some, Few” framework,²⁵ enabling maternity hospitals/units to offer programmes at an appropriate level for all staff relevant to their roles. It may also assist, in part, with challenges in releasing staff for training. Strengths of this study include the response rate and use of established frameworks in survey development and analysis. Limitations should be noted. Programme details presented are primarily based on quantitative analysis of textual responses, which varied in depth and breadth. Furthermore, we did not independently verify these details, for example, against any programme manuals.

Appropriate education and training of staff is important in ensuring good quality bereavement care services for people who experience pregnancy loss or perinatal death.¹³ This mapping

study provides useful data which should be harnessed by decision-makers in developing, implementing and/or scaling-up programmes nationally.

Declaration of Conflicts of Interest:

Professor Keelin O'Donoghue leads the implementation of the National Standards for Bereavement Care following Pregnancy Loss and Perinatal Death¹⁴ on behalf of the NWIHP. She is clinical lead for pregnancy loss at one of the study sites, and was involved in the development, delivery and evaluation of the 'TEARDROP' workshops.¹¹ Marita Hennessy PhD is a member of the Advisory Group for the National Standards for Bereavement Care following Pregnancy Loss and Perinatal Death. Her postdoctoral role was wholly or partially funded by the NWIHP during the period 01/08/2022 to 30/11/2023.

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References:

1. Nuzum D, Meaney S, O'Donoghue K. The impact of stillbirth on consultant obstetrician gynaecologists: a qualitative study. *BJOG*. 2014;121(8):1020–8.
2. O'Connell O, Meaney S, O'Donoghue K. Caring for parents at the time of stillbirth: How can we do better? *Women and Birth*. 2016;29(4):345–9.
3. Schaap AHP, Wolf H, Bruinse HW, Barkhof-van de Lande S, Treffers PE. Long-term impact of perinatal bereavement: Comparison of grief reactions after intrauterine versus neonatal death. *European Journal of Obstetrics & Gynecology and Reproductive Biology*. 1997;75(2):161–7.
4. Nuzum D, Meaney S, O'Donoghue K. The impact of stillbirth on bereaved parents: A qualitative study. *PLOS ONE*. 2018;13(1):e0191635.
5. Helps Ä, O'Donoghue K, O'Byrne L, Greene R, Leitao S. Impact of bereavement care and pregnancy loss services on families: Findings and recommendations from Irish inquiry reports. *Midwifery*. 2020;91:102841.
6. Health Information and Quality Authority. National survey of maternity bereavement care in Ireland shows most parents were positive about the care they received, but some areas can be improved | HIQA [Internet]. 2023. Available from: <https://www.hiqa.ie/hiqa-news-updates/national-survey-maternity-bereavement-care-ireland-shows-most-parents-were>.
7. Koopmans L, Wilson T, Cacciatore J, Flenady V. Support for mothers, fathers and families after perinatal death. *Cochrane Database of Systematic Reviews*. 2013;2013(6):CD000452.
8. Meaney S, Corcoran P, Spillane N, O'Donoghue K. Experience of miscarriage: an interpretative phenomenological analysis. *BMJ Open*. 2017;7(3):e011382.
9. Aggarwal N, Moatti Z. "Getting it right when it goes wrong – Effective bereavement care requires training of the whole maternity team". *Best Practice & Research Clinical Obstetrics & Gynaecology*. 2022;80:92–104.
10. Leitao S, Helps A, Cotter R, O'Donoghue K. Development and evaluation of TEARDROP - a perinatal bereavement care training programme for healthcare professionals. *Midwifery*. 2021;98:102978.
11. Shakespeare C, Merriel A, Bakhbakhi D, Blencowe H, Boyle FM, Flenady V, et al. The RESPECT Study for consensus on global bereavement care after stillbirth. *International Journal of Gynecology and Obstetrics*. 2020;149(2):137–47.
12. Boyle FM, Horey D, Middleton PF, Flenady V. Clinical practice guidelines for perinatal bereavement care — An overview. *Women and Birth*. 2020;33(2):107–10.
13. Health Service Executive. National Standards for Bereavement Care following Pregnancy Loss and Perinatal Death. Version 2 [Internet]. Dublin: Health Service Executive; 2022. Available from: <https://www.hse.ie/eng/services/list/3/maternity/bereavement->

[care/bereavement%20care%20following%20pregnancy%20loss%20and%20perinatal%20death.pdf](#).

14. Gardiner PA, Kent AL, Rodriguez V, Wojcieszek AM, Ellwood D, Gordon A, et al. Evaluation of an international educational programme for health care professionals on best practice in the management of a perinatal death: IMproving Perinatal mortality Review and Outcomes Via Education (IMPROVE). *BMC Pregnancy and Childbirth*. 2016;16:376.
15. Qian J, Sun S, Wu M, Liu L, Yaping S, Yu X. Preparing nurses and midwives to provide perinatal bereavement care: A systematic scoping review. *Nurse Education Today*. 2021;103:104962.
16. Ratislavová K, Bužgová R, Vejvodová J. Perinatal palliative care education: An integrative review. *Nurse Education Today*. 2019;82:58–66.
17. O'Donoghue K, Cotter R. On the Implementation of the National Standards for Bereavement Care Following Pregnancy Loss and Perinatal Death [Internet]. Dublin: National Women and Infants Health Programme, Health Service Executive; 2021. Available from: <https://www.hse.ie/eng/about/who/acute-hospitals-division/woman-infants/bereavement-care/hse-national-standards-for-bereavement-care.pdf>.
18. Braun V, Clarke V, Boulton E, Davey L, McEvoy C. The online survey as a qualitative research tool. *International Journal of Social Research Methodology*. 2021;24(6):641–54.
19. Thomas SL, Pitt H, McCarthy S, Arnot G, Hennessy M. Methodological and practical guidance for designing and conducting online qualitative surveys in public health. *Health Promotion International*. 2024;39(3):daae061.
20. Glasgow RE, Harden SM, Gaglio B, Rabin B, Smith ML, Porter GC, Ory MG, Estabrooks PA. RE-AIM planning and evaluation framework: Adapting to new science and practice with a 20-year review. *Frontiers in Public Health*. 2019;7:64.
21. Hoffmann TC, Glasziou PP, Boutron I, Milne R, Perera R, Moher D, et al. Better reporting of interventions: template for intervention description and replication (TIDieR) checklist and guide. *BMJ*. 2014;348:g1687.
22. Hennessy M, O'Donoghue K. Mapping perinatal bereavement care education/training for maternity staff in the Republic of Ireland. OSF, 03 December 2024. Available from <https://osf.io/8dgz9/>.
23. Hsieh HF, Shannon SE. Three approaches to qualitative content analysis. *Qualitative Health Research*. 2005;15(9):1277–88.
24. Damschroder LJ, Reardon CM, Widerquist MAO, Lowery J. The updated Consolidated Framework for Implementation Research based on user feedback. *Implementation Science*. 2022;17(1):75

25. Health Service Executive. Perinatal Bereavement Education Standards [Internet]. 2019.
Available from: <http://pregnancyand.wpengine.com/bereavement-education-standards/>.