

Exploring healthcare professionals' experiences when communicating with pregnant patients about stillbirth

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Abstract

Aim

The aim of this study was to conduct a survey to gain understanding of maternity healthcare professionals (HCP) views, attitudes and opinions regarding stillbirth and prevention, with a view to informing the development of risk reduction strategies.

Methods

An online survey (Qualtrics) was administered to healthcare professionals (HCPs, n =92) in a tertiary hospital, exploring HCP knowledge and attitudes regarding stillbirth and risk factors. Responses were exported to SPSS for analysis. Open-ended questions were coded according to pre-established criteria. Descriptive statistics and cross-sectional tabs were used to analyse the data.

Results

While 79 (87%) of respondents had cared for patients after a stillbirth, only half of respondents correctly identified all components of the Irish definition for stillbirth. Modifiable risk factors perceived as most important to discuss with pregnant patients were attendance at antenatal care (35 respondents, 48%), followed by smoking (25 respondents, 34%). Maternal weight was the risk factor that HCPs found hardest to discuss with patients (43 respondents, 70%), and was also perceived as the risk factor that pregnant patients are most reluctant to discuss with HCPs. Time constraints were identified as a major barrier to both providing education and supporting behaviour change in pregnancy.

Discussion

HCPs face multiple challenges in discussing important risk factors for stillbirth. Prioritisation of HCP education and protected time to discuss modifiable risk factors during antenatal care are key to enhancing preventive efforts.

Introduction

Stillbirth is one of the most devastating outcomes that families can experience. Worldwide, there are 2.6 million stillbirths every year¹. In Ireland, the corrected rate of stillbirth in 2022 was 2.69 per 1000 births; of note the latest national report highlights that a reduction in non-anomalous perinatal deaths, particularly stillbirths, has not been achieved.²

Previous research has highlighted the importance of focusing prevention efforts on tackling the risk factors for stillbirth, which include maternal and fetal medical factors, obstetric related factors, sociodemographic factors, and behavioural factors. Some risk factors (smoking, alcohol, illicit drug use), antenatal care attendance, sleep position and maternal weight-related risks) are modifiable and can be tackled through behaviour change interventions³.

Although there is considerable evidence supporting the association between these risk factors and stillbirth, this information is not easily available to patients⁴. In addition, previous research has established that healthcare professionals encounter barriers discussing topics that are perceived as sensitive, such as weight or substance use⁵.

Given the clinical need to address the ongoing issue of stillbirth, evidence-based behaviour change interventions to tackle behavioural risk factors for stillbirth need to be designed. Identifying barriers to communicating with patients about stillbirth and healthcare professionals is a first step towards that purpose. Therefore, the aim of this study was to explore how healthcare professionals understand the issue of stillbirth and associated risk factors, and to gain understanding regarding perceived barriers towards addressing these issues with pregnant patients.

Methods

The study was carried out in a larger (>6000 deliveries/year) maternity units in the Republic of Ireland. An online survey was piloted, refined and built into an online platform using Qualtrics Version 2022. All HCPs (across a range of disciplines including medical, nursing and midwifery) working in the hospital were targeted to complete this online survey opportunistically in the course of their clinical work via the distribution of QR codes in physical form and via email. Ethical approval for the study was obtained from the Clinical Research Ethics Committee of Cork Teaching Hospitals University College (Reference number ECM 4 (i) 6/7/2021 & ECM 3 (gg) 10/08/2021). Between February and May 2022, 92 HCPs employed in the hospital engaged with the survey, however, not all participants completed all questions of the survey.

The survey was composed of 3 sections (see Supplementary file 1):

Experience: role, place of work, years of experience, involvement in the care of stillborn babies.

Stillbirth and risk factors: knowledge about definition, prevalence, risk factors.

Behaviour change and communication with pregnant patients: habits regarding discussing risk factors with patients, attitude towards discussing risk factors, perceived barriers.

Responses were exported to SPSS for analysis. Open-ended questions were coded according to pre-established criteria extrapolated from existing literature regarding risk factors for stillbirth. Descriptive statistics and cross-sectional tabs were used to analyse the data.

Results

Ninety-two healthcare professionals engaged with the survey; however, only 72 completed the survey fully. Regardless of the level of completion of the survey, we included all valid responses for analysis.

The sample included various maternity healthcare professionals, with midwives representing more than half of the participants. Most respondents had experience diagnosing stillbirth and being present at stillborn births. 40% of the overall sample, n=36 reported caring for parents after stillbirth multiple times a year (see Table 1). The survey results showed that 38/76 (50%) HCPs were able to identify the definition correctly. Partially incorrect definitions could lead to exclusion of some cases when making a clinical decision- for example, 11 (14.5%) were able to identify only the birth weight element correctly (see Table 1).

HCPs were also asked how prevalent they estimate stillbirth to be in Ireland as a figure per 1000 births. We considered a response as valid if it ranged between 3.5 and 4.5. Only 11 respondents (15%) gave a value between those two parameters.

Table 1: Characteristics and experience of the sample & knowledge of the definition of stillbirth

		n	Valid %
Professional role (n = 92)	Senior House Officer (SHO)	6	6.5
	Specialist Registrar (SpR)	14	15.2
	Consultant	15	16.3
	Midwife	44	47.8
	Specialist Midwife	7	7.6
	Midwifery Management	5	5.4
	Nurse	1	1.1
Place of work* (n = 92)	Outpatient clinic	41	44.6
	Antenatal wards	46	50
	Postnatal wards	52	56.5
	Labour ward	47	51.1

			Early pregnancy Unit	29	31.5
			Fetal assessment unit/ultrasound department	29	31.5
			Emergency room	36	39.1
			Outreach clinics (outside of main hospital)	16	17.4
Years working in maternity services (n = 92)	Less than a year		5	5.4	
	1-3 years		18	19.6	
	4-6 years		21	22.8	
	10-15 years		18	19.6	
	16-20 years		6	6.5	
	>20 years		24	26.1	
Professional experience related to stillbirth					
Involvement in caring for a patient after stillbirth (n = 91)	Yes		79	85.9	
	No		12	13	
Years of experience at first care of patient after stillbirth (n = 76)	Less than a year		38	50	
	1-3 years		24	31.6	
	4-6 years		6	7.9	
	7-10 years		2	2.6	
	10-15 years		3	3.9	
	>20 years		3	3.9	
Experience diagnosing a stillbirth (N= 90)	Yes		50	55.6	
	No		40	44.4	
Presence at delivery of stillborn baby (N= 90)	Yes		58	64.4	
	No		32	35.6	
Frequency of caring for parents after stillbirth (n = 91)	Never		13	14.3	
	Around once a year		28	30.8	
	Several times a year		36	39.6	
	Around once a month		10	11	
	Around once a week		4	4.4	

	N	Valid %
All elements identified incorrectly (birthweight, connector and gestational age)	3	3.9
All elements identified correctly	38	50
Birthweight only identified correctly	11	14.5
Gestational week only identified correctly	7	9.2

Birthweight and gestational age identified correctly but use of connector "AND"	10	13.2
Birthweight and gestational age identified correctly but no connector selected	10	9.2
Total	76	100

Stillbirth is currently defined in Ireland as “a child born weighing **500 grams** or more or having a gestational age of **24 weeks** or more who shows no sign of life.”

Respondents identified several risk factors associated with stillbirth, the most common risk factors cited were hypertensive disorders (n = 45, 60%), diabetes (n = 41, 54.7%), infections (n = 33, 44%), placental abruption (n=33, 43.4%), fetal growth restriction (n= 31, 40.8%), maternal age (n=30, 39.5%), and placental insufficiency (n=27, 35.5%). HCPs were also asked regarding their perception of the most common modifiable risk factors associated with stillbirth. The risk factors most commonly mentioned were maternal weight (n= 48, 52.2%) and smoking (n= 46,50%)(see Figure 1).

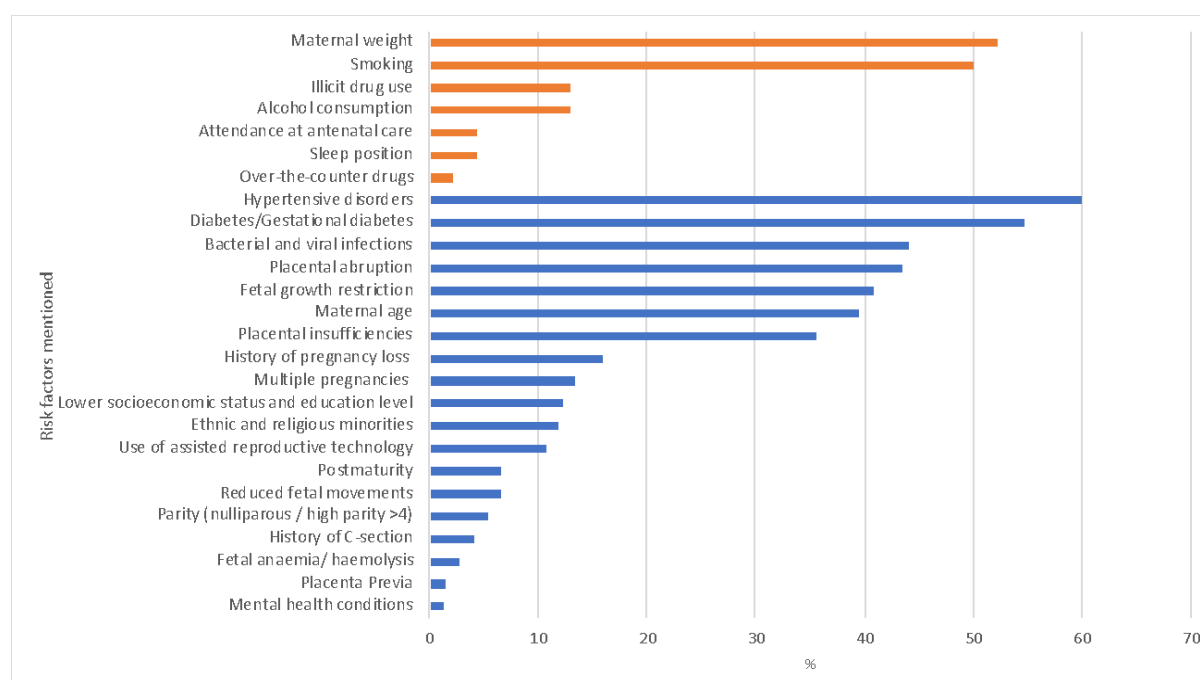


Figure 1: Most commonly mentioned general and modifiable/behavioural risk factors.

The majority of respondents (n=66, 89%) reported having learned about stillbirth and associated risk factors in postgraduate training and/or through professional guidelines; 52 HCPs (61%) reported learning about stillbirth in undergraduate education. 45 respondents (48%) reported having attended a hospital-based study day on stillbirth.

65 HCPs (90%) reported that they provide tailored advice to all patients in their care always or often. Regarding substance use, less than half of the sample (n= 29, 40.3%) reported discussing smoking risks with all patients under their care often or always, regardless of their smoking status. Only 21 HCPs (29.1%) reported discussing alcohol risks with all patients in their care, regardless of their drinking status. Only 11 HCPs (15.2%) reported consistently discussing illicit drug use with all patients in their care, regardless of their drug use status. 40 HCPs (56%) reported frequently discussing substance use risks with patients who disclose substance use.

Regarding weight, only 17 (23%) of HCPs reported regularly discussing weight related risks with all patients under their care. 9 (9.8%) of HCPs reported generally providing weight management advice to all patients. Almost half of the sample (34 respondents, 47%) stated that they habitually focus weight management advice to patients who are overweight or obese. 61 HCPs (85%) reported consistently advising patients in their care to attend and engage with all their antenatal care visits, and 60 (83%) reported recommending all patients to seek unscheduled care in case of concerns. 70 HCPs (97%) reported providing advice regarding monitoring fetal movements to all patients in their care. Regarding sleeping position, only 36 HCPs (50%) reported frequently providing advice to patients about the safest sleep position during pregnancy. 35 healthcare professionals (47.9%) ranked antenatal care attendance as the most important behavioral risk factor to discuss, followed by smoking risks (n=25, 34.2%). Sleep position was perceived as the least important to discuss (see Table 2).

Table 2: Risk factors prioritised from most important to discuss (1) to least important to discuss (6) as perceived by HCPs.

	Smoking (n = 73)	Alcohol (n = 72)	Illicit Drugs (n = 72)	Weight related risks (n = 72)	Attendance antenatal care (n = 73)	at Sleeping position (n = 71)
	% (n)	% (n)	% (n)	% (n)	% (n)	% (n)
1	34.2 (25)	0	11.1 (8)	2.8 (2)	47.9 (35)	4.2 (3)
2	32.9 (24)	13.9 (10)	13.9 (10)	22.2 (16)	12.3 (9)	5.6 (4)
3	20.5 (15)	33.3 (24)	15.3 (11)	9.7 (7)	13.7 (10)	8.5 (6)

4	8.2 (6)	29.2 (21)	16.7 (12)	25.0 (18)	8.2 (6)	12.7 (9)
5	1.4 (1)	18.1 (13)	20.8 (15)	27.8 (20)	11.0 (8)	21.1 (15)
6	2.7 (2)	5.6 (6)	22.2 (16)	12.5 (9)	6.8 (5)	47.9 (34)

Most HCPs (n=43, 70.5%) considered weight as the most difficult topic to discuss for themselves, followed by illicit drug use (n=15, 24.2%). Similarly, 40 HCPs (59.7%) considered that patients under their care find weight related risks, followed by drug use (n=15, 22.7%) most difficult or are most reluctant to discuss. The topic perceived as easiest to discuss by HCPs was attendance at antenatal care (n=29, 50.9%), and for patients (as perceived by HCPs) the easiest topic to discuss was sleeping position (n=42, 73.7%) (see Figure 2).

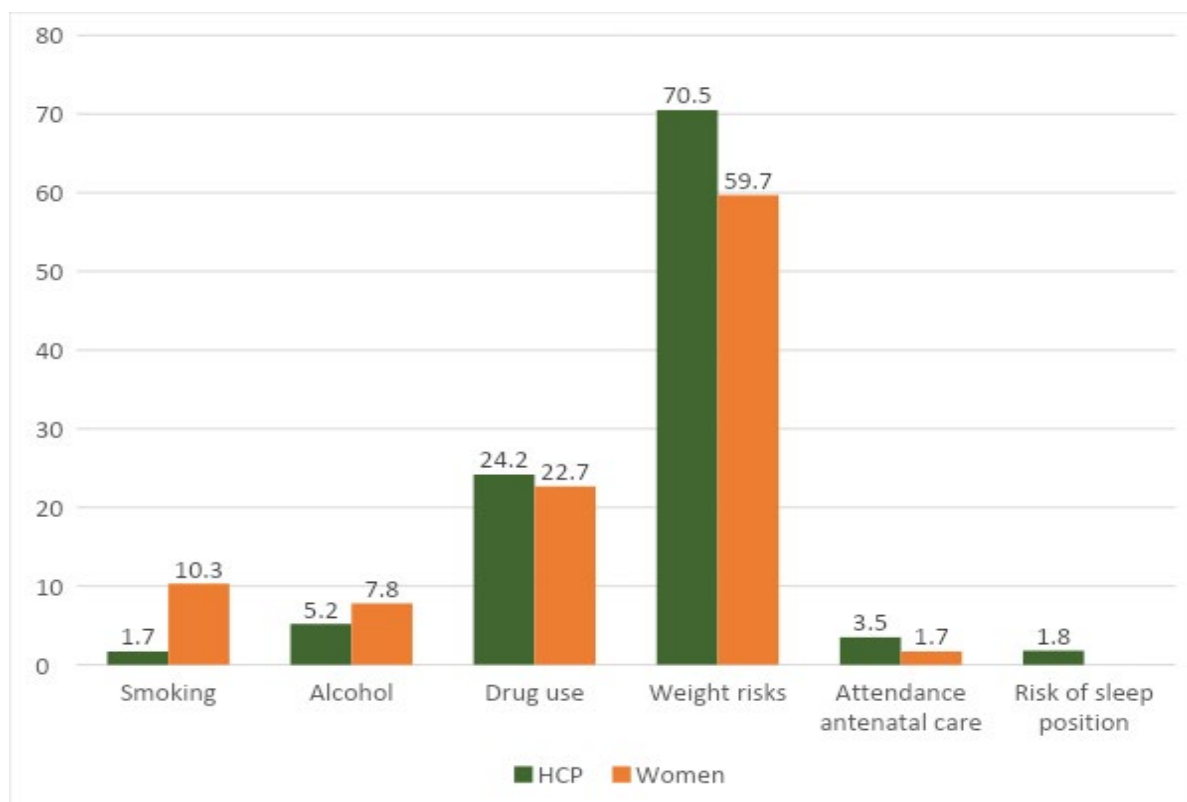


Figure 2: Comparison of topics perceived by HCPS as most difficult/reluctant to discuss for themselves and for patients

The majority of HCPs agreed that exploring patients' habits and previous clinical history were part of their role. The majority also felt that providing advice regarding health habits, supporting and monitoring behaviour change fell within their remit. Generally, time, rather than lack of knowledge, was identified as a barrier to these tasks. 44 HCPs (62%) agreed or strongly agreed that they could avail of sufficient resources to educate and support patients to make health changes in their behaviour. 41 (57.7%) agreed or strongly agreed that they felt confident and trained to speak about stillbirth with patients under their care. 57 (80.3%) agreed or strongly agreed that it is necessary to mention the risks of stillbirth to patients to influence their behaviour change.

Discussion

This study provides insights into healthcare professionals' perspectives on stillbirth, its risk factors, and their experiences in communicating with pregnant patients. There was a spectrum of different roles reflected in the responses; interestingly, half of respondents had been in their clinical role within the maternity services for less than a year when they were first involved in caring for families experiencing a stillbirth. Given the sensitive nature of this contact, this underlines the need for comprehensive training in pregnancy loss at undergraduate level.

This survey also considered HCP knowledge regarding stillbirth prevalence and risk factors. Half of respondents could correctly identify the Irish definition for stillbirth. Correctly identifying the definition is crucial for accurate clinical decision-making and statistical reporting. Similarly, understanding the prevalence of stillbirth is vital for informing patients and facilitating discussions about risk reduction. Moreover, incorrect categorisation can have significant implications for bereaved parents at an already difficult time. A pertinent example of this is maternity leave, which in Ireland is extended to patients who have had a stillbirth as defined by the national guidelines⁷. Fifteen per cent of the sample was able to accurately identify the Irish prevalence of stillbirth. Accurate knowledge of stillbirth prevalence is crucial so that HCPs can factually educate patients, allowing them to make informed choices regarding their behaviours during pregnancy.

A notable finding was the commitment of respondents to engaging in risk reducing measures. This is consistent with a growing movement for patient autonomy and involvement in healthcare, which in the specific context of stillbirth posits that omitting to discuss the small but real risk of stillbirth represents a negligence of its own⁸.

Obstacles to care were also explored. Several barriers to discussion of risk factors and behavioural change were reported, including inadequate time, lack of confidence and training. Our data suggested that more experienced HCPs felt confident and trained to speak about stillbirth with patients under their care and to support behaviour change as compared

to less experienced HCPs. This suggests that a combination of “real world” experience and formal training (in the form of postgraduate education and hospital study days) improves HCP confidence in both education and support of pregnant patients. As above, it is suggested that training- such as simulation- may provide a safe way for HCPs to learn to “get it right on the first go”^{9,10}. This has potential to improve the pregnant patients’ experience but also to support HCPs with a structured approach to difficult conversations.

Similarly, barriers on the part of both HCPs and pregnant patients were observed in the discussion of specific risk factors. HCPs must acknowledge the way social stigma may influence their discourse around behavioural change, with some qualitative work suggesting “directive” or “critical” public health campaigns have the opposite to intended effect¹¹. Stigma often represents a significant barrier to engaging in risk reducing measures¹², with vulnerable patients often having multiple overlapping exposures to risk¹³. Previous studies have shown that active engagement with risk reduction rather than merely describing risk was perceived as more useful, underlining the need for practical advice and support¹⁴. In the context of stillbirth prevention, further research is warranted in how best to compassionately address this challenge.

Further work regarding the integration of tailored peripartum care into current antenatal practice is warranted. Any such work should address knowledge, practical, educational, and logistical elements to improve care and reduce the risk of stillbirth. Focus areas include facilitating discussions on weight management and substance misuse and recognising the overlapping nature of risk factors. Addressing these risks can enhance overall care and health beyond stillbirth prevention. Additionally, policy-level integration of stillbirth prevention education can return significant benefits for patients, families, and healthcare professionals.

Declarations of Conflicts of Interest:

None declared.

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