



Family presence during resuscitation: a needs assessment of education, policy, and opinion in Canada

Présence de la famille pendant la réanimation: évaluation des besoins en matière d'éducation, de politiques et de position au Canada

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Abstract

Purpose Family presence during resuscitation (FPDR) has been widely endorsed. Nevertheless, there is limited information available on current education and training used to support FPDR implementation, including that of relevant policy. Understanding the current state of FPDR educational opportunities, policies, and practices across Canadian hospitals is crucial to advancing and standardizing these within our medical community. Our objective was to identify the current and desired state of education and policy on FPDR, as well as current practices and opinions of Canadian healthcare professionals.

Methods We selected questionnaire topics and employed a modified Delphi consensus technique using a group of subject matter experts in resuscitation. We contacted a stratified sample of Canadian healthcare professionals via select listservs and surveyed the cohort using RedCAPTM. We used descriptive statistics and conducted quantitative analyses to describe and test for significant differences among groups.

Results In total, 635 surveys were completed. Only 46.3% of participants reported ever attending an educational opportunity involving learning how to manage FPDR;

however, 92% wanted training. Only 11% knew if they had an official FPDR policy in their current hospital but 62.9% indicated they wanted one. In support of FPDR, 88% agreed that family members should be allowed to be present during a resuscitation.

Conclusion While opinions are mostly positive towards FPDR, there exists a gap between the current and desired state of education and policy supporting it within Canada.

Résumé

Objectif La présence de la famille pendant la réanimation est largement appuyée. Néanmoins, il existe peu d'informations disponibles sur l'éducation et la formation actuelles utilisées pour soutenir la mise en œuvre de la présence de la famille pendant la réanimation, y compris l'information touchant les politiques pertinentes. Il est essentiel de comprendre l'état actuel des opportunités de formation, des politiques et des pratiques en matière de présence familiale pendant la réanimation dans l'ensemble des hôpitaux canadiens afin de les faire progresser et de les standardiser au sein de la communauté médicale. Notre objectif était de déterminer l'état actuel et souhaité de la formation et des politiques en matière de présence familiale pendant la réanimation, ainsi que les pratiques et les opinions actuelles des professionnels de la santé canadiens.

Méthode Nous avons sélectionné un questionnaire et utilisé une technique de consensus Delphi modifiée afin d'obtenir les réponses d'un groupe d'experts en matière de réanimation. Nous avons communiqué avec un échantillon stratifié de professionnels de la santé canadiens par l'entremise de gestionnaires de liste sélectionnés et avons sondé notre cohorte à l'aide de l'application RedCAPTM. Nous avons utilisé des statistiques descriptives et effectué

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des analyses quantitatives pour décrire et tester les différences significatives entre les groupes.

Résultats *Au total, 635 sondages ont été complétés. Seuls 46,3 % des participants ont déclaré avoir déjà assisté à une opportunité de formation portant sur l'apprentissage de la gestion de la présence familiale pendant la réanimation; toutefois, 92 % des répondants ont déclaré désirer une formation. Seulement 11 % des répondants savaient s'il existait une politique officielle de présence de la famille pendant la réanimation dans leur hôpital, mais 62,9 % ont indiqué qu'ils souhaitaient en avoir une. En faveur de la présence familiale, 88 % étaient d'avis que les membres de la famille devraient être autorisés à être présents lors d'une réanimation.*

Conclusion *Bien que les opinions soient pour la plupart positives à l'égard de la présence familiale pendant la réanimation, il existe un écart entre l'état actuel et souhaité de la formation et des politiques qui l'appuient au Canada.*

Keywords family presence · resuscitation · resuscitation team · education · policy · needs assessment

Family-centred care, including family presence during resuscitation (FPDR), has recently been endorsed by relevant associations and organizations.^{1–3} Reported benefits of FPDR for family members include finding comfort in being present,⁴ aiding in their grief if the patient dies, helping them to know everything possible was done for their loved one, and families feeling that it is their right to be present.⁵ Nevertheless, the medical community has voiced concerns over this practice, such as inhibition of staff performance, increased stress, legal repercussions, and impact on the quality of resuscitation provided when family members are present.^{6–11} These concerns may persist if there is lack of support for healthcare providers (HCPs) in terms of education and presence of hospital policies.

The need for training is not a new issue. The National Consensus Conference on family presence during cardiopulmonary resuscitation recommended education for all HCPs.¹² Limited information exists but two recent studies conducted with critical care nurses found that only a third had ever received education on FPDR despite 83% expressing a desire for education.^{13,14}

Despite recommendations put forth by national organizations,^{1,3,15} many hospitals do not have an official family presence policy.^{12,13,16} This leaves HCPs in the difficult position of making decisions in the moment. Understanding the current state of FPDR educational opportunities, policies, and practices across Canadian

hospitals is a crucial component of advancing and standardizing Canadian FPDR education and policy recommendations within our medical community.

Our objectives for this study were to 1) identify current and needed FPDR educational opportunities, official and unofficial FPDR policies, as well as current practices across Canada; 2) capture the opinions and experiences of Canadian HCPs with FPDR; and 3) identify whether any systematic differences exist based on hospital demographics and characteristics.

Methods

We surveyed a stratified sample of Canadian intensive care unit (ICU) and emergency department (ED) HCPs (physicians, nurses, and respiratory therapists), social workers, and administrative leaders using RedCAPTM (Vanderbilt University, Nashville, TN, USA). University of Calgary Research Ethics Board approval was granted prior to conducting the study (June 2017).

We selected questionnaire topics that included availability of FPDR-related education, hospital policies, and HCP perceptions of how FPDR is practiced in their own institution, including the benefits and challenges of FPDR. We employed two rounds of a modified Delphi consensus technique¹⁷ using a group of resuscitation subject matter experts (SMEs). Subject matter experts were asked to suggest rewording and inclusion of new items. The majority of SMEs had to rank the item as 4 or 5 on a five-point scale for the item to make it into the final survey. Next, a convenience sample of resuscitation team members and hospital administration staff at Alberta Children's Hospital pilot tested the instrument to assess completeness, clarity, and to identify redundant questions or questions that provided little value to the overall questionnaire.¹⁸

When the survey was first administered, there were 1,461 hospitals in Canada.¹⁹ We aimed to obtain a representative sample of respondents from these hospitals based on their demographic makeup such that each subgroup was represented. Permission was obtained from each of the following organizations to distribute questionnaires via their listservs: Canadian Critical Care Society (800 members), Canadian Association of Critical Care Nurses (1,400 members), Canadian Association of Emergency Physicians (2,494 members), National Emergency Nurses Association (1,200 members), Canadian Association of Social Workers (18,000 members), Canadian Society of Respiratory Therapists (4,682 members), and the Canadian Association of Pediatric Health Centers (30 organizational members). To maximize response rate, a notice about the survey was sent out prior to its dissemination as well as a follow-up reminder,

when allowed by the listserv. Consent was obtained from all participants at the beginning of the survey.

We used descriptive statistics to calculate responses among various respondent groups (i.e., profession, size of hospital, adult vs pediatric, ICU vs ED). To test for significant differences among groups, we employed quantitative analysis methods, including the Chi square test, the *t* test, correlation analysis, and analysis of variance. Coding and subsequent thematic content analysis was conducted on the short-answer responses. We were unable to calculate a response rate as we did not have access to the total number of subscribers to each listserv.

Results

In total, 635 surveys were completed (Table 1). Participants reported a mean (standard deviation [SD]) of 14.5 (10.8) years experience in their role (range, 0.5–43).

Table 1 Respondent demographic information

Population	Frequency	%
Adult and pediatric	328	51.7
Adult	230	36.2
Pediatric	77	12.1
Profession		
Nurse	299	47.1
Physician	173	27.2
Social worker	94	14.8
Respiratory therapist	15	2.4
Administrative leader	14	2.2
Nurse practitioner	5	0.8
Pharmacist	1	0.2
Other	34	5.4
Department		
Emergency department	334	52.6
Intensive care unit/critical care unit	209	32.9
Other	92	14.5
Type of hospital		
Rural/primary	138	21.7
Regional/secondary	160	25.2
Academic/tertiary	337	53.1
Region		
Prairies	281	44.2
Central	195	30.7
Atlantic	80	12.7
West Coast	12	11.8
Territories	4	0.6
Total = 635		

Respondents reported experiencing FPDR a mean (SD) of 21.1 (30.8) times (range, 0–200). The complete survey and results can be found in the Electronic Supplementary Material (ESM).

Family presence during resuscitation education and training

Only 46.3% (286/618) of participants reported attending an educational opportunity involving managing FPDR. When asked if training on FPDR should be provided to staff in their department, 92.0% (554/602) selected “yes,” 6.1% (37/602) were uncertain, and only 1.8% (11/602) selected “no.” Different respondent groups reported different educational opportunities (Table 2). For those who had an educational opportunity, 71.3% (204/286) attended a presentation or seminar, 44.4% (127/286) a training/educational workshop, and 39.9% (114/286) simulation-based training. Nevertheless, HCPs reported that their most common source for obtaining knowledge on managing FPDR was on-the-job learning rather than any formal source (76.4%; 463/606) (eAppendix, Table EO5; ESM).

The most common topics during education and training included awareness of the process and rationale for FPDR (85%; 243/286), and where to put family members in the room (70.6%; 202/286). Least likely to be covered were the legal effects of FPDR (18.9%; 54/286) and how to assess family members for eligibility for FPDR (34.4%; 98/286) (eAppendix, Table EO4; ESM). Education/training desired by HCPs can be found in eAppendix, Table EO6; ESM.

Family presence during resuscitation policy and practice

CURRENT FPDR POLICY

Only 10.7% (64/598) of respondents knew they had an official FPDR policy in their current hospital or health region, with 27.8% (166/598) saying they did not have one and the vast majority (61.5%; 368/598) being uncertain. We found a significant relationship between the presence of a policy and hospital type ($\chi^2 [4] = 10.88; P = 0.03; n = 598$); 6.3% said yes in rural, 9.9% said yes in regional, and 12.8% said yes in academic hospitals. Most respondents stated that policies always allowed families in the room (57.8%; 37/64), some stated that they allowed the team to decide (18.8%; 12/64), and the rest were unsure (14.1%; 9/64) or indicated that it stated something else (9.4%; 6/64). No participants had a policy that stated families were never allowed in. The majority said that family members were allowed to stay as long as they were not disruptive (81.7%; 49/60), and/or they had a support person with them (53.3%; 32/60) (eAppendix, Table P3; ESM). Regarding

Table 2 Educational opportunity differences among different respondent groups

Characteristics	n	FPDR educational opportunity exposure			χ^2	P
		Yes %	No %	Not sure %		
Role	464				1.02	0.60
Physician	169	48.5	43.2	8.3		
Nurse	295	53.2	38.6	8.1		
Patient population	294				0.977	0.61
Adult	218	45.4	45.9	8.7		
Child	76	50	39.5	10.5		
Hospital type	618				16.88*	0.002
Rural	132	37.1	56.1	6.8		
Regional	156	38.5	52.6	9		
Academic	330	53.6	38.8	7.6		

* $P \leq 0.05$.

FPDR = family presence during resuscitation.

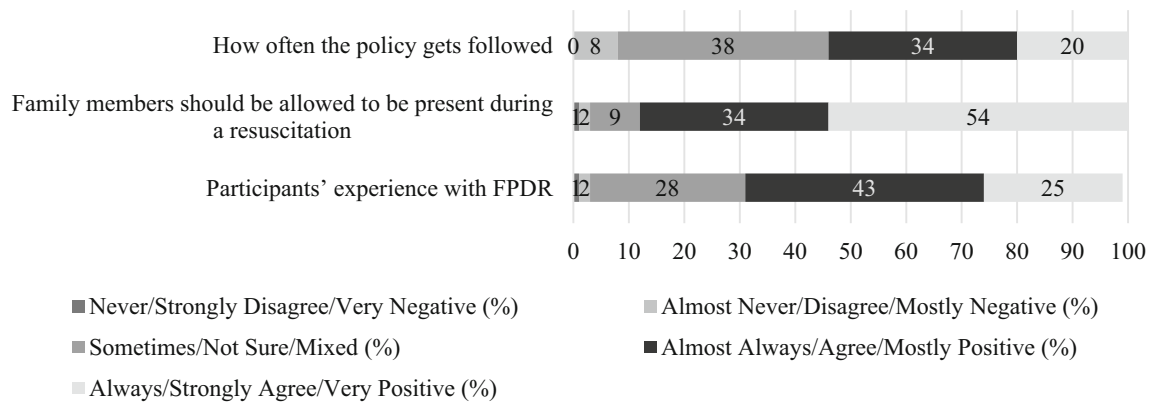


Figure Participants' experience and opinion with FPDR. FPDR = family presence during resuscitation.

whether the policy is followed, 54.7% (35/64) confirmed it was always or almost always followed (Figure).

Official policy and usual practice

While very few knew of having an official FPDR policy, the majority did have a usual practice that most HCPs followed (51.7%; 309/598), with less than a quarter not having one (23.3%;139/598) and the rest being unsure (25.1%; 150/598). A more detailed look at participants official policy (official) and usual practice (unofficial) highlighted the level of inconsistency across and within the two practices (Table 3).

Regardless of official vs usual practice, most participants were uncertain if there were recommendations stipulating when to remove a family member from the room and what those circumstance may be (38.1%; 24/63 and 41.5%; 127/306, respectively). For

both official and usual practice, the majority said that family members could be removed from the room when they were physically interfering with the resuscitation (96.6%; 57/59), they were considered to be distracting (67.8%; 40/59), or the physician requested it for any reason (52.5%; 31/59) (eAppendix, Table P8; ESM). Nevertheless, respondents were divided on if a family member may be removed if they were considered to be too loud; 45.8% (27/59) said yes and 39% (23/59) said no. The majority felt that it was not appropriate to remove a family member if any member of the resuscitation team requested it (49.2%; 29/59). Last, when asked if hospital policy dictated there had to be a support person with the family 50.5% (300/594) said they were unsure, 22.1% (131/594) said no, and 19.4% (115/594) said yes.

Table 3 What is included in a hospital policy vs usual practice

	Hospital policy %	Usual practice %
How many family members can be present during a resuscitation?		
No limit	20.6	27.5
3	0.0	2.3
2	15.9	18.0
1	1.6	2.3
Not specified in policy	23.8	19.6
Not sure	38.1	30.4
Are the family members evaluated in some manner being present?		
Yes	28.6	23.2
No	15.9	30.4
Not specified in policy	34.9	15.0
Not sure	20.6	31.4
Does the lead physician have to agree with family presence for it to be allowed?		
Yes	20.6	42.8
No	25.4	24.5
Not specified in policy	19.0	8.8
Not sure	34.9	23.9
Does the family have to be given instructions on what they can and cannot do before being allowed in the room?		
Yes	33.3	31.0
No	9.5	30.1
Not specified in policy	22.2	10.1
Not sure	34.9	28.8
Total (n)	63.0	306

What is needed for policy

When asked if HCPs wanted an official written hospital policy, 62.9% (368/585) said yes, 19.1% (112/585) said no, and 17.9% (105/585) were unsure. What should be

included in a policy and perceived barriers can be found in Tables 4 and 5.

Opinions on FPDR

We asked participants to rate the extent to which they agreed with the statement “family members should be allowed to be present during a resuscitation”. Results showed high support with 88.0% (506/575) agreeing or strongly agreeing with the statement and only 3.1% (18) disagreeing or strongly disagreeing (Figure). There were significant differences based on patient population and policy existence (Table 6). Last, a correlation analysis found that FPDR experience and support for FPDR were positively correlated ($r[575] = 0.169$; $P < 0.001$).

Comfort level with FPDR

When asked what participants current comfort level with having family members present during resuscitation was, 76.9% (442/575) of participants identified themselves as comfortable or very comfortable with only 9.0% (52/575) identifying themselves as uncomfortable or very uncomfortable, and the rest were not sure (14.1%; 81/575). Significant differences were found in comfort level between departments and patient populations (Table 6). Examination of FPDR experience and comfort level revealed that increased FPDR experience was related to increased FPDR comfort level ($r[575] = 0.308$; $P < 0.001$).

When asked what their comfort level was with managing family members if they became disruptive, 52.3% (301/575) were comfortable or very comfortable, 26.8% (154/575) were uncomfortable or very uncomfortable, and 20.9% (120/575) were not sure. Similar to before, FPDR experience correlated positively

Table 4 What participants believe should be included in an FPDR policy. They could select all that apply

What should be included in a FPDR policy	Frequency	%
The circumstances under which a family member should be asked to leave	523	86.9
Who decides whether a family member should be present	472	78.4
If a support person is mandatory	409	67.9
If a family member should be asked to leave	407	67.6
How many family members may be present	400	66.4
Who the support person should be	380	63.1
If the family members need to be screened for eligibility immediately before entering the room	367	61.0
Other	46	7.6
Total	602	100

FPDR = family presence during resuscitation.

Table 5 Perceived greatest barrier to an official FPDR policy

Barriers to FPDR Policy	Frequency	%
Healthcare professionals may no longer feel they are able to deny family members access to the room if they feel it appropriate to do so	177	30.3
Concerns over the availability of a support person for all resuscitations	158	27.1
A general lack of acceptance of a policy with healthcare professionals	101	17.3
Other	59	10.1
Concerns over adequate space in every room	44	7.5
Concerns about the psychological effects on healthcare professionals	23	3.9
Concerns of ineffective pre-screening of family members	22	3.8
Total	584	100

FPDR = family presence during resuscitation.

with comfort level with managing family members if they become disruptive ($r[575] = 0.204$; $P < 0.001$).

Perceived barriers to and benefits of FPDR

The greatest barrier to incorporating FPDR was that family presence would increase stress among the staff. Nevertheless, most barriers presented as an option were rated as low (eAppendix, Table O1; ESM). Almost three quarters of respondents strongly disagreed or disagreed with the statements that families were likely to physically interfere with the resuscitation procedure (74.3%; 428/575), that rates of legal action against staff would increase (72.4%; 417/575), and that FPDR should not be normal practice (71.2%; 410/575) (eAppendix, Table O2; ESM).

Experience with FPDR

FREQUENCY OF FAMILY BEING INVITED

Regarding being invited to be present for a resuscitation, 36.9% (210/569) of families were reported as always or almost always being invited, 35.5% (202/569) as sometimes being invited, and 27.6% (157/565) as never or almost never being invited. Patient population, department, and policy existence affected how often family members were invited to be present. *T* tests showed that those who worked with an adult population reported the family being invited significantly less often than those who worked with children (mean [SD], 3.24 [1.00] vs 2.06 [0.91]; $t[268] = 8.601$; $P < 0.001$). The same effect was found for those that worked in the ICU (mean [SD], 3.01 [0.96]) reporting the family being invited significantly less often than those who worked in the ED (mean [SD], 2.67 [0.97]; $t[391.22] = 3.73$; $P < 0.001$; equal variances not assumed). Last, people with no policy (mean

[SD], 3.02 [1.04]) reported the family being invited significantly less often than those who had a policy (mean [SD], 2.29 [1.00]; $t[215] = -4.64$; $P < 0.001$).

Struggles with FPDR

The top-rated items that HCPs struggle with were not having enough people to manage the resuscitation and the family (45.8%; 276/602), knowing the right thing to say to the family (43.3%; 261/602), and not having someone available with a medical background to speak to the family during the resuscitation (37.9%; 228/602). Less commonly, HCPs struggled with the increased noise in the room (21.1%; 127/602), family members asking HCPs questions during the procedure (19.9%; 120/602), and the family being physically in the way (15.9%; 96/602). Of note, 18.8% (113/602) said they had not struggled at all.

Support person for family

We asked participants how often there was a support person with the family members during the resuscitation; 12.3% (70/569) of the participants responded with always, 35.3% (201/569) almost always, 35.1% (200/569) sometimes, 12.8% (73/569) almost never, and 4.4% (25/569) never. When there was a support person present, it was most often either a social worker (38.7%; 220/585) or a nurse (35%; 199/585) (eAppendix, Table E7; ESM).

Experience with FPDR

Overall, when rating their experience with FPDR, 68.5% (392/569) rated it as very or mostly positive, with only 3.2% (18/569) saying it was negative or mostly negative (Figure).

Table 6 Demographic comparisons

Topic	Variable	N	Mean	Agreement and comfort with FPDR						
				SD	t	df	P	F	df	P
HCP's agreement with the statement "family members should be allowed to be present during a resuscitation"										
	Patient Population				2.01	268	.05			
	Adult	201	1.70	0.84						
	Child	69	1.46	0.87						
	Policy existence				-2.4	217	0.02			
	No policy	160	1.58	0.84						
	Yes policy	59	1.32	0.63						
	Role				1.76	429	0.08			
	Physician	162	1.67	0.89						
	Nurse	269	1.53	0.73						
	Hospital type							1.47	2,572	0.23
	Rural	123	1.72	0.89						
	Regional	147	1.63	0.72						
	Academic	305	1.57	0.84						
HCP's comfort level with FPDR										
	Department				3.10	487	0.002			
	ICU	185	2.12	1.02						
	ED	304	1.85	0.90						
	Patient Population				3.83	268	< 0.001			
	Adult	201	2.18	1.04						
	Child	69	1.65	0.87						
	Policy existence				-1.36	217	0.18			
	No policy	160	1.91	0.98						
	Yes policy	59	1.71	0.93						
	Role				-0.88	429	0.38			
	Physician	162	1.90	0.96						
	Nurse	269	1.98	0.93						
	Hospital type							2.06	2,572	0.13
	Rural	123	2.00	0.94						
	Regional	147	2.12	0.96						
	Academic	305	1.99	0.97						

* $P \leq 0.05$ (two-tailed). 1 = very comfortable/strongly agree and 5 = very uncomfortable/strongly disagree. ED = emergency department; FPDR = family presence during resuscitation; HCP = healthcare provider; ICU = intensive care unit; SD = standard deviation.

Discussion

This research emphasizes that the desires of Canadian HCPs align well with existing themes found in the literature for enabling FPDR, including training and education, formal policy, and support staff for the family.^{11,20,21} Nevertheless, we have found considerable gaps between the need for these and what currently exists in our system.

Gaps in education and training

Our study highlighted a significant gap between those who desired FPDR education and training (92.0%) and those who said they had received it (46.3%). Research shows that better preparedness of HCPs to facilitate family members in the room can result in more favourable opinions and increase both HCP comfort and self-confidence with FPDR.^{9,16,22–25} Training may also better equip nurses and support staff to manage concerns such as speaking to the parent and supporting them during and after a resuscitation.^{14,22,26,27}

For those who had received education or training, the delivery format was very standard. First, three quarters of HCP's FPDR training was identified as coming from on-the-job learning. Educators should consider if this is the best setting for learning and identify if this poses a potential patient safety risk. Future research should assess the effects of FPDR training on task performance during a resuscitation. Second, education was most often in the form of a presentation or seminar (71.3%). While research has yet to confirm the best educational approach for FPDR material and training,²³ evidence suggests that education be interprofessional to encourage a team approach to FPDR.¹⁴ Areas for future research should include the impact of FPDR training using different formats.

Gaps in knowledge and implementation of policy

A large gap was identified between those who wanted a policy (62.9%) compared with those who were aware they had one (10.7%). Similar results were found in a 2008 survey by the Canadian Association of Critical Care Nurses,²⁸ thereby suggesting that there has been little improvement in over a decade. This is unfortunate as our study, like others,¹⁶ found that having a written policy may be a significant predictor of HCPs holding positive perceptions of FPDR. We also found the communication of policies to be poor with 61.5% of respondents admitting they were unaware of if they had a FPDR policy, and many with policies being unclear on the contents. These findings are comparable to those in the USA.^{13,16} Moving forward, we suggest policy makers consider implementing a FPDR policy if it is relevant in their hospital. Whether a policy or guidelines, educators need to increase the communication around policies and create visible material to improve understanding. A well-communicated policy has been conceived as a useful avenue to increase the consistency of FPDR practice within a hospital.²¹

Gaps in the practice of FPDR

The majority of Canadian HCPs either agreed or strongly agreed with FPDR (88.0%). Despite the endorsement of the practice, fewer than two fifths of respondents reported family members always or almost always being given the option to be present. A possible reason for this may be fear of additional stress caused by family presence as it was rated as a top barrier, with only 38.1% saying their training covered this topic. While most HCPs are comfortable with FPDR, this number drops to just half if family members are disruptive. Evidence shows that training is a significant factor in quelling some of HCP's fears^{9,16,23} and should be further explored in relation to increasing HCP comfort in

all aspects of FPDR and frequency of invitations extended to family members to be present.

With respect to a support person, there was strong agreement that a member of the resuscitation team should be dedicated to looking after the family (86.2%). A desire for a support person for the family is consistent in the literature across countries and HCPs.^{20,21,29–31} Our results showcase the high level of infrequency with which a support person is always present (12.3%). Without a designated support person, such as a social worker, it is often left to resuscitation team members to take on that role.²⁹ Nevertheless, HCPs most frequently reported difficulty is insufficient personnel to manage the resuscitation and the family (45.8%). Having a support person is likely important to minimize distraction to the team and potentially to prevent family members from exhibiting behaviours that may be distracting.³² Furthermore, most randomized controlled trials that have studied FPDR effects on resuscitation performance have had a support person with the family^{33–36} meaning their findings may not extend to those without. We consider this to be a potential safety risk that deserves further attention.

Our study was limited in that the design prohibits causal claims. For example, we cannot equate a lack of policy and educational opportunities on quality of care provided to patients and families. Furthermore, we were limited in our ability to estimate a response rate and so our results reflect only those who chose to respond. In this vein, while every effort was made for a representative sample, our findings may not represent every sub-population of Canada and therefore could be biased towards certain subgroups and their experiences/opinions. Moving forward, future research should assess the effectiveness of training, education, and policy, using experimental designs if possible, in reducing noted barriers to FPDR and increasing its potential benefits.

This research brings to light the existence of FPDR education, policy, and attitudes of Canadian HCPs, while identifying gaps and future needs. We hope this research will better inform development and implementation of effective educational opportunities and policies for resuscitation team members within Canada that will ultimately bring us closer in alignment with the recommendations put forth by national organizations.^{3,37,38} While these situations can be complex, there is abundant compassion with which HCPs and staff respond to family members. Ensuring adequate education, training, and policy are in place for HCPs may prove an important component in upholding FPDR as a safe and beneficial practice for all parties involved, including the families, the resuscitation team, and most importantly, the patient.

Author contributions Amanda Deacon contributed to study conceptualization and design, data collection, and data analysis. She also drafted the initial manuscript and reviewed and revised the manuscript. Thomas A. O'Neill contributed to conceptualization and design of the study and reviewed and revised the manuscript. Elaine Gilfoyle contributed to conceptualization and design of the study, data collection, and reviewed and revised the manuscript. All authors approved the final manuscript as submitted and agree to be accountable for all aspects of the work.

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