

Implementing an End-of-Life Communication Skills Training Program for Trainees in the Intensive Care Unit

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Introduction

- Intensive care unit (ICU) patients face a high risk of morbidity and mortality, often requiring patients and their families to navigate complex decisions regarding treatment options and goals of care.
- Effective end-of-life (EOL) communication skills are essential for delivery of patient- and family-centered care.
- We implemented an EOL communication skills training program and assessed the impact on trainees' skills and attitudes toward EOL care.

Methods

- We conducted a prospective qualitative study at Norwalk Hospital, a community teaching hospital, from March to January 2025.
- Participants included internal medicine residents and fourth-year medical students rotating through the ICU (n=33).
- The EOL communication skills training program included an 1-hour session facilitated by a pulmonary and critical care medicine fellow (Figure 1).
- The training session taught the following four core competencies:
 - Agenda-setting
 - Ask-Tell-Ask framework
 - Clear information delivery
 - Recognition and response to emotion
- Participants completed pre- and post-session surveys evaluating communication skills, and perceived comfort and attitudes toward EOL conversations using a 5-point Likert Scale (i.e., poor=1, fair=2, good=3 very good=4, excellent=5).
- Effect size was calculated using Cohen's d_z.
- Effect size of ≥ 0.8 was considered large.

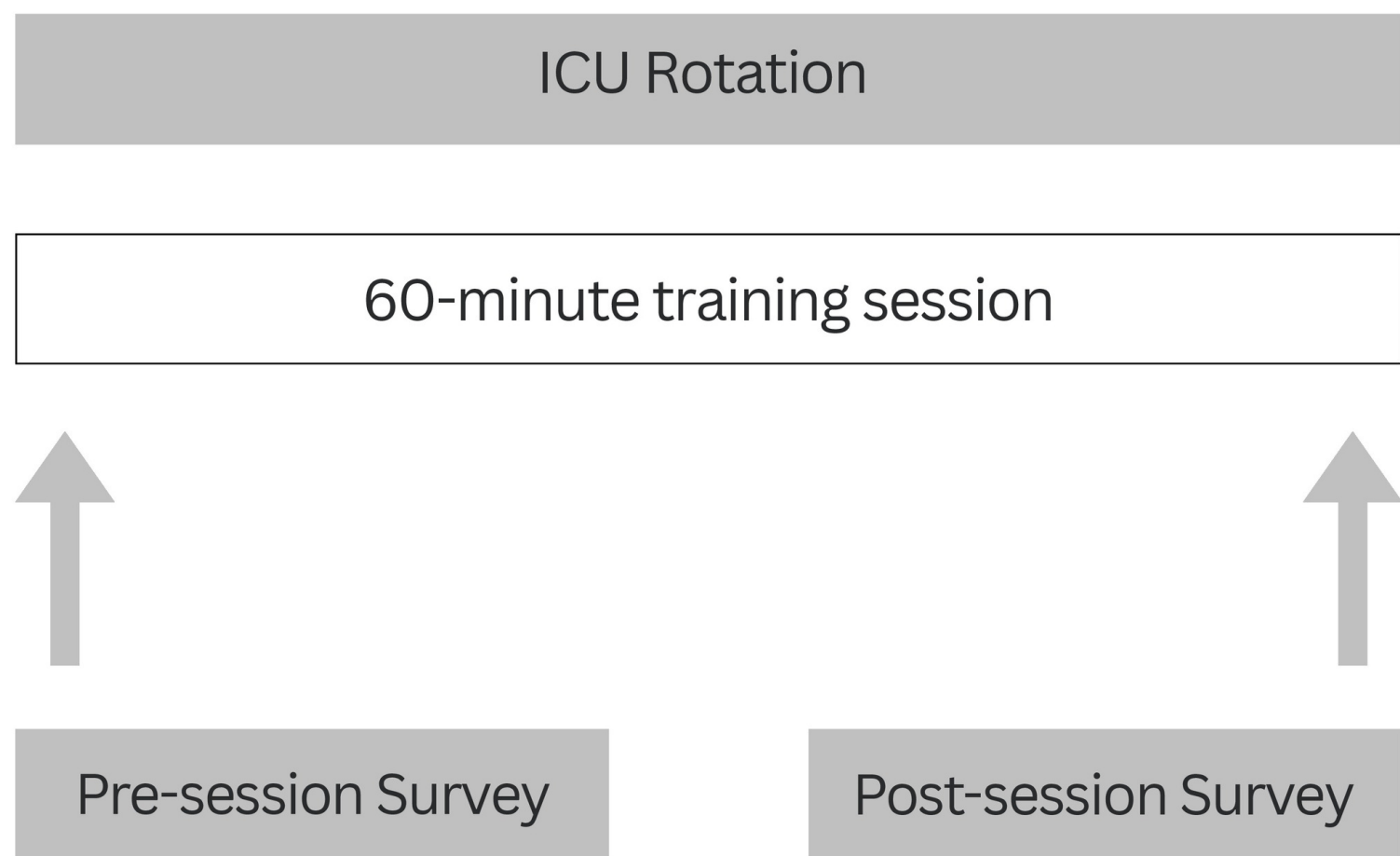


Figure 1. Study schematic design and data collection schedule.

Results

- 33 participants completed EOL communication training session and surveys
 - 3rd and 4th year medical students = 5
 - PGY-1 = 10
 - PGY-2 = 12
 - PGY-3 = 6
- A large effect size (or >0.8) was observed across nearly all survey items (p<0.001) indicating an improvement in trainees' self-perceived EOL skills (Table 1).
- Across all items, a large proportion of pre-survey responses that were rated poor/fair changed to very good/excellent on the post-survey (Figure 2).
- A positive mean change in self-rated EOL communication skills across all survey items favors implementation of the training session (Figure 3).

Domain	Skill/Survey Item	n	Pre-training Mean ± SD	Post-training Mean ± SD	Mean Change ± SD Change	Effect Size	p-value
Foundational Behavioral Skills	Knowing what language to avoid	33	2.18 ± 0.68	3.73 ± 0.67	1.55 ± 0.94	1.65	<0.001
	Establishing a meeting agenda collaboratively	33	2.36 ± 0.78	3.61 ± 0.75	1.24 ± 0.9	1.38	<0.001
	Eliciting patients values and preferences from family	33	2.58 ± 0.75	3.76 ± 0.66	1.18 ± 0.95	1.24	<0.001
	Communicating next steps to the family	33	2.45 ± 0.79	3.67 ± 0.69	1.21 ± 0.99	1.22	<0.001
	Communicating to family that concerns are understood	33	2.73 ± 0.8	3.85 ± 0.62	1.12 ± 0.96	1.17	<0.001
	Being interested in the patient as a whole	33	2.94 ± 0.75	3.64 ± 0.74	0.7 ± 0.95	0.73	<0.001
	Helping family feel at ease in a meeting	33	3.0 ± 0.97	3.91 ± 0.77	0.7 ± 0.95	0.73	<0.001
Foundational Emotional Skills	Letting a family tell “their story”	33	2.97 ± 0.85	3.79 ± 0.86	0.82 ± 1.13	0.72	<0.001
	Verbally expressing empathy to family	33	3.06 ± 0.83	3.88 ± 0.82	0.82 ± 0.95	0.86	<0.001
	Non-verbally expressing empathy to family	33	3.18 ± 0.81	3.85 ± 0.76	0.67 ± 1.05	0.63	0.002
Advanced Communication Skills	Leading a family meeting	33	2.27 ± 0.84	3.42 ± 0.71	1.15 ± 0.8	1.45	<0.001
	Explaining patients rapid decline	33	2.45 ± 0.75	3.58 ± 0.79	1.12 ± 0.93	1.21	<0.001
	Delivery of bad news to patients family	33	2.33 ± 0.85	3.39 ± 0.75	1.06 ± 1	1.06	<0.001
	Overall EOL communication score	33	2.66 ± 0.56	3.7 ± 0.61	1.04 ± 0.73	1.44	<0.001

Note: Survey responses were coded on a 5-point Likert-type scale: Poor = 1, Fair = 2, Good = 3, Very Good = 4 and Excellent = 5. Mean change was calculated as post-training score minus pre-training score. Effect size was calculated using Cohen's d, defined as the mean paired change divided by the standard deviation of paired change scores. P-values were calculated using Wilcoxon signed-ranked tests.

Table 1. Pre- and Post-Training Self-Reported End-of-Life Communication Skills and Effect Sizes

Conclusion

- Brief, structured communication training can meaningfully enhance trainee skills and confidence in end-of-life communication in the ICU.
- Additional training sessions and inclusion of a simulated family meeting with standardized patients/families are future opportunities to further develop trainees' EOL communication skills.

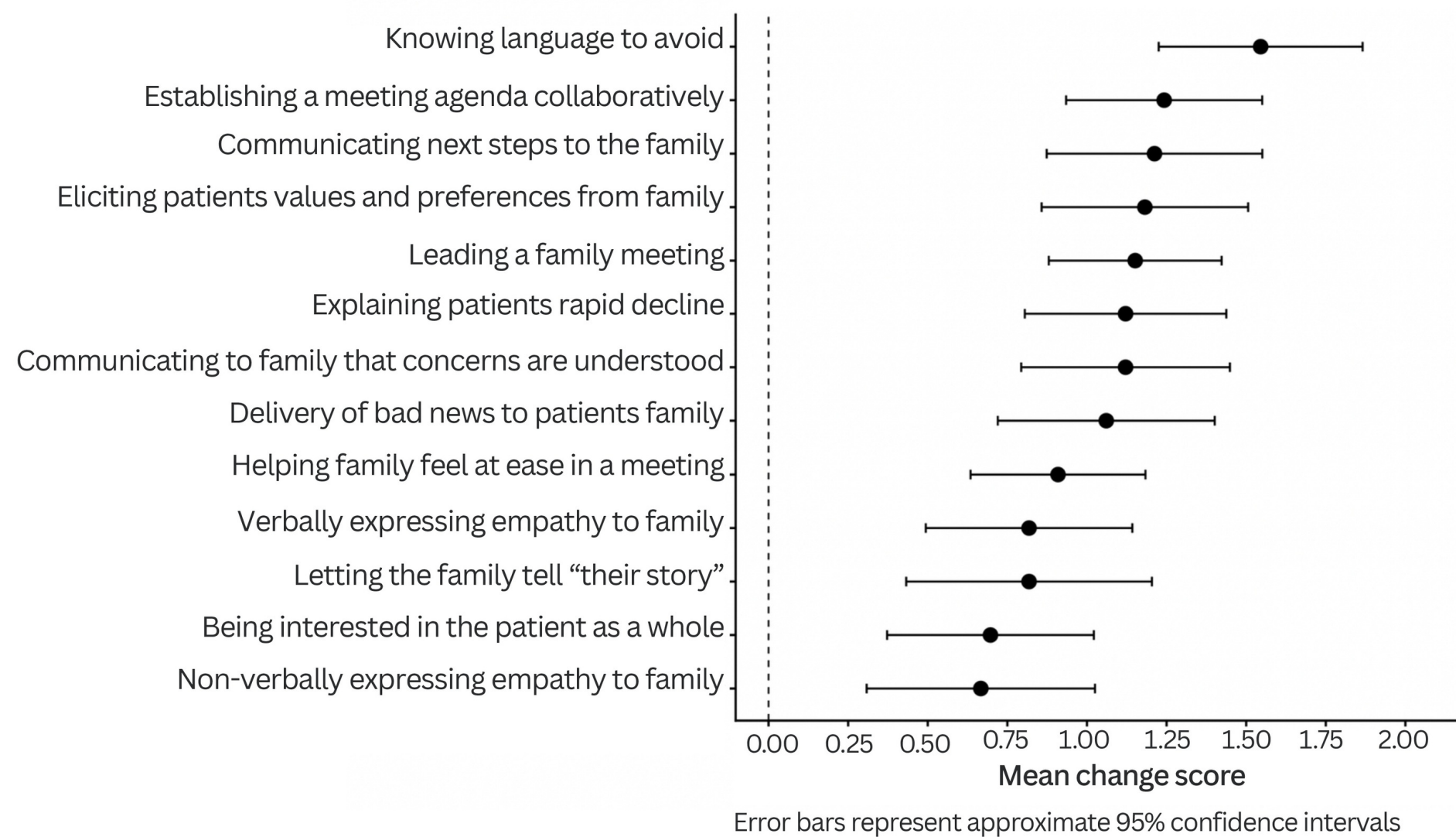
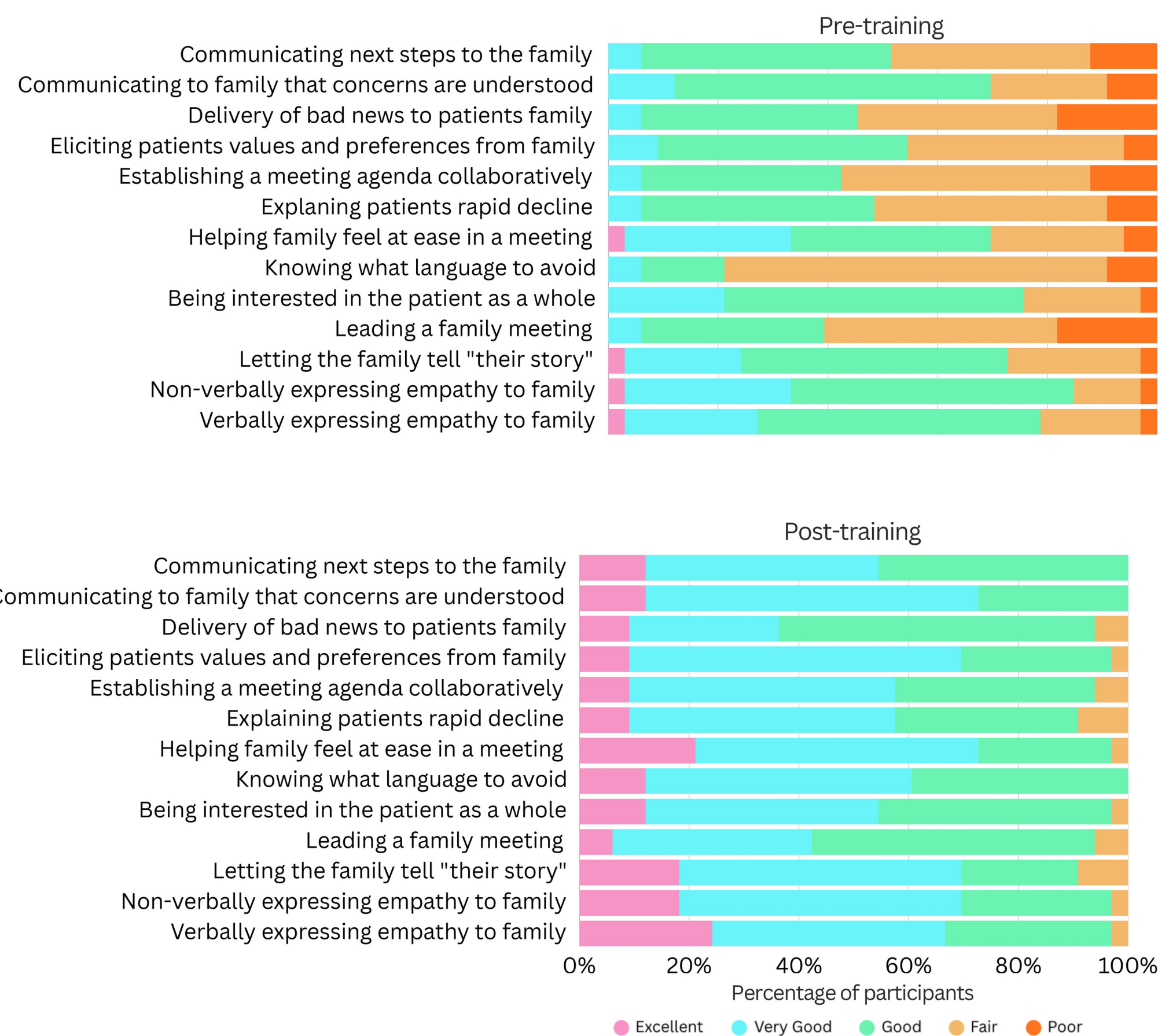


Figure 3. Mean Change in Self-Rated End-of-Life Communication Skills Following Training