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Enhancing the capacity of oncology nurses to provide supportive care for parents with advanced cancer: Evaluation of an educational intervention

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ABSTRACT

Aim: This study aimed to enhance the capacity of oncology nurses to provide supportive care for patients with advanced cancer who have dependent children.

Method: This was a pilot study of an educational intervention comprising a study-developed self-directed learning manual, supported by a day-long communication skills training workshop. Evaluation pre- and post-training included measures of stress and burnout, self-reports of confidence and attitudes, responses to clinical vignettes and video-taped interviews with simulated patients.

Results: Nurses found the educational intervention highly acceptable, and reported increased confidence in their ability to provide information and support for parents, and to initiate discussion about emotional issues. There were significant improvements in general communication skills and skills specific to this training, as well as reduced use of blocking.

Conclusion: Brief communication skills training supplemented with tailored educational resources can enhance confidence skills and knowledge of oncology nurses regarding their supportive care of parents with advanced cancer.

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1. Introduction

The emotional burden of coping with advanced cancer is considerable, but for parents with dependent children, grief and guilt about the potential impact on their children is profound.¹ Unfortunately parents often fail to receive the information they desire to help them respond to their children, this compound-

ing parental distress.² In the absence of support and information, the instinctive response of parents may be to avoid discussion in order to 'protect' their children³ or confine discussions to information provision rather than exploration of their children's emotional needs.⁴ It is unsurprising then that distress levels of children are higher during their parent's terminal illness than after bereavement.⁵ Although perhaps expected

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that health professionals such as nurses will provide support in this context, the nature of this care is poorly defined,⁶ and emotionally challenging.⁷ Nurses describe insufficient psychosocial training to provide supportive care,⁸ leading to feelings of inadequacy and hopelessness in dealing with the children and adolescents of patients with advanced cancer.⁹

Oncology health professionals face many difficult communication tasks¹⁰ and specific training is effective in improving ability to communicate even in challenging circumstances.¹¹ An educational intervention was thus developed to enhance the ability of oncology staff to provide support and information for parents with advanced cancer about ways to assist their children to cope. Oncology nurses were selected as the initial training group as support from oncology nurses is effective and acceptable to patients.¹² Nurses are also often asked for information by patients, and are aware of the need for skill development in this area.¹³ This paper reports an evaluation of this educational intervention.

2. Method

This pilot study employed a quasi-experimental design, with evaluation by pre- and post-training measures.

2.1. Participants and procedure

Oncology nurses employed in the Oncology Unit of one of three participating hospitals in a metropolitan city, with a good command of English, and intending to stay in their current place of employment for the next 6 months were informed about the study by the respective Nurse Investigator and invited to attend an information session. Ethical clearance was obtained from each hospital, and interested nurses were given written Information and Consent sheets.

2.2. The intervention

The intervention comprised a self-directed educational manual and a day-long communication skills training workshop. Development and content of the educational manual have been described elsewhere.¹⁴ Communication skills training workshops were conducted 6–8 weeks after recruitment to allow nurses time to complete the educational manual. Five workshops were conducted, the number of participants in each ranging from 5 to 8. Workshops commenced with an overview of evidence about communication in oncology, with special reference to parents with advanced cancer, after which participants developed scenarios for role-plays. Nurses were encouraged to make role-plays personally challenging, but not overwhelming, termed the 'learning edge'.¹⁵ Guiding principles underpinning each workshop were that: participants defined their own learning needs, participated in role-plays and received constructive feedback in a safe environment which allowed them to try new techniques and acquire new skills.^{16,17}

2.3. Measures

Nurses completed measures at recruitment (T1) and following completion of the communication skills training workshop

(T2). An acceptability survey was administered approximately 6 months after the completion of T2 measures (T3).

2.3.1. Measures of burnout and psychological morbidity

Given nurses' perceptions of the burden of caring and the potentially emotionally challenging content of the educational intervention it was important to ensure that participation did not pose a stress for nurses, assessed using the following measures:

- (i) *Maslach Burnout Inventory (MBI)*: This widely used measure of occupational stress and burnout with high reliability and validity¹⁸ yields dimensions of Emotional Exhaustion (feeling emotionally exhausted and overextended by work), Depersonalisation (an impersonal response towards the recipients of one's care) and Personal Accomplishment (feelings of competence and successful achievement in one's work).¹⁹ A score of 27 and above signifies high Emotional Exhaustion; 13 or over signifies high Depersonalisation; and 39 or over indicates low Personal Accomplishment.¹⁸
- (ii) *General Health Questionnaire 28 (GHQ)*: This brief self-report measure has been extensively used to screen for psychosocial morbidity, yielding subscales of Somatic Symptoms, Anxiety, Social Dysfunction and Severe Depression; a score of four or more is considered indicative of 'caseness' of psychological morbidity.²⁰ It has high reliability and validity, and is sensitive to change over time.²⁰

2.3.2. Measures of perceived stress, confidence and attitudes

No existing measures assess attitudes of nurses to the specialised role of provision of support and information for parents with advanced cancer, or their confidence in this role. Hence a questionnaire was designed for this study, based on relevant literature and results of focus groups conducted for this study.¹³ The measure was pilot-tested with five nurse unit managers and a cohort of student nurses. The measure assesses: perceptions of stress and support at home and work and attitudes to, and confidence about provision of information and support for parents with advanced cancer. Each item was rated on a Likert scale, ranging from 1 = Not at all, to 5 = Extremely.

2.3.3. Assessment of knowledge – clinical vignettes

To evaluate knowledge specific to this educational intervention, two clinical vignettes were included (see Table 1).

Responses to the vignettes were transcribed verbatim, read in their entirety and initial codes developed as a basis for developing themes. Themes were examined across all respondents and T1 and T2 responses to identify consistencies or contrasts, a variant of content analysis.²¹ Themes were modified and revised through further comparison across groups, yielding seven final themes. Each participant's responses to the vignette were coded for content, and a point assigned for each theme mentioned. Thus each participant was given a score for each of the seven themes, this score measuring the frequency with which the participant's re-

Table 1 – Clinical vignettes.

The following vignettes have been developed from clinical cases. The aim of this is to gain some idea of how you would respond to these situations if they arose in your clinical work

Please read the following vignettes and complete the questions which follow:

Angus is a 5-year-old boy whose father has advanced lung cancer. Angus has become clingy and is now wetting the bed. His mother, Lucy, tells him that he should be a 'big brave man' and asks for your advice about what else to do

List, in order, seven (7) things you would say to Lucy in your role as a nurse

Mary is a 46-year-old single woman with advanced breast cancer. Her 16-year-old daughter Julia always seems angry, and is reluctant to help in the house. Mary tells you that she ends up shouting at her daughter as 'nothing else seems to get through to her', and asks you what else she can do

List, in order, seven (7) things that you would say to Mary in your role as a nurse

sponse mentioned that theme. As this was a novel approach to evaluation, all vignettes were coded independently by two coders and points of difference in coding resolved by discussion. Kappa scores calculated for each theme ranged from 0.75 to 1.0 which was considered acceptable.

2.3.4. Assessment of skills – simulated patient interviews

Nurses participated in a 5-min video-taped interview with a simulated patient who played the role of Janice, a distressed 38-year-old woman with cerebral metastases from breast cancer. The patient was married, with daughters aged 14 and 12 years. Nurses were provided with a written sheet outlining Janice's medical status, and told that their role was to help 'calm her down' after Janice had received the unexpected news that she required admission. Nurses had 5 min to consider how they would proceed before commencing the role play. The simulated patient was trained to give a number of Scripted Cues (SC) during the interview (see below). To maintain consistency, two simulated patients were trained and the same scenario and cues used pre-and post-training.

All videotapes were transcribed, and transcripts coded in several ways. A rating of quality (ranging from 1 = Basic, to 3 = Extended) was given for General Interactional skills (GCs) and responses to Scripted Cues (SCs), and scores were summed for related components. Final coding categories were thus:

(i) Response to Scripted Cues in which patient attempts to downplay concerns/'put on a brave face' (Scripted Cues 1–3):

- 'Sorry to be such a bother. I know the clinic is really busy today' (SC 1).
- 'Oh I was upset when I was told I needed to come into hospital because I wasn't expecting it. But I'm fine now' (SC 2).
- 'I know I've got to be strong for Tony and the girls. If I'm not strong I'm no use to anyone' (SC 3).

(ii) Response to Scripted Cues in which patient is overtly distressed (Scripted Cues 4–6):

- 'Sometimes I just don't know what to do' (SC 4).
- 'What should I say to the girls?' (SC 5).
- 'I can't talk about it with them. It tears me apart to think of not being there for them' (SC 6).

(iii) General Interactional skills (General Codes (GCs) 1–4):

- Clarification of the patient's concerns.
- Asking about the patient's feelings.
- Expressions of empathy.
- Active listening, summarising.

(iv) Communication skills specific to this study (General Codes (GCs) 5–7):

- Emphasising the importance of open communication with daughters.
- Nurse confidence in responding to overtly distressed patient.
- Discussing openly the patient's poor prognosis and encouraging Janice to explore these issues with her daughters.

(v) Response to Unscripted Emotional Cues:

- The number of Unscripted Emotional Cues was not equal for all interviews, ranging from 0 to 10. A rating of quality was given for each response to an Unscripted Cue and these were summed then averaged to achieve a maximum possible score of three in order for comparisons to be made.

(vi) Blocking behaviours not otherwise coded:

- Blocking behaviours such as changing the topic, offering premature reassurance or trying to cheer the patient up were recorded as present or absent. Scores indicated the total number of blocking responses which occurred independently of Scripted Cues or Unscripted Emotional Cues.

A coding manual was produced. A second coder independently re-coded a random sample of 50% of interviews yielding Kappa scores between 0.69 and 0.93 which was considered acceptable.

2.3.5. Acceptability survey

A survey was used to assess the acceptability of the educational intervention. Nurses were asked to rate the usefulness of components of the educational manual such as the reflective and problem-solving exercises. Responses were rated on a Likert scale ranging from 1 = Not at all, to 5 = Extremely. Nurses were also asked to describe their emotional responses to the workshop, and comment on the impact of the training on their clinical practice.

3. Analysis

Analysis of the quantitative data was undertaken using SPSS 15.0. Descriptive analyses were carried out and groups compared at baseline (T1) and post-training (T2) using Wilcoxon Paired Ranks Tests for non-parametric data. Because of the large number of ties in the Likert responses in questionnaires, responses were compared across time using Marginal Homogeneity, a non-parametric test for two related ordinal variables. The test is an extension of the McNemar test from binary response to multinomial response. It tests for changes in response using the χ^2 distribution, and is useful in detecting change in responses due to experimental intervention in before-and-after designs (SPSS 15.0). Associations between some groups within the sample were investigated by means of χ^2 tests.

4. Results

4.1. Sample characteristics

Approximately 25% of eligible oncology nurses who were informed about the study expressed interest in participation. The final sample comprised 35 nurses of whom three withdrew prior to participation in the communication skills training workshop, because of work or personal commitments. Comparisons across time are thus reported for participants for whom complete pre-and post-training data sets were available. The majority of participants were female and only one had received specific psychosocial training. Demographic details are provided in Table 2.

Table 2 – Demographic characteristics (n = 35).

Characteristic	
<i>Age in years</i>	
Mean (SD)	39.7 (10.4)
Median (range)	37.0 (22–64)
<i>Marital status</i>	
Single	8 (22)
Married	21 (60)
Widowed	0
Divorced/separated	3 (9)
Not stated	3 (9)
<i>Gender</i>	
Female	33 (94)
Male	2 (6)
Years in oncology: median (range)	9 (0.5–25)
Current serious illness in family member	12 (34)
<i>Bereavement</i>	
Number who had experienced death of first degree relative	18 (51)
Median age in years at bereavement (range)	23.5 (0.5–58)
Number who were aged 21 years or younger at bereavement	8 (23)

Table 3 – Stress and burnout and psychological morbidity, median scores (n = 32).

Measure	T1 (range)	T2 (range)	Positive change ^a (%)	Negative change ^a (%)	Wilcoxon paired ranks test result
<i>Maslach Burnout Inventory</i>					
Emotional Exhaustion (EE)	19.0 (5–43)	20 (4–38)	11 (34)	18 (56)	Z = -1.202; p = 0.24
Depersonalisation (DP)	3.0 (0–20)	3.5 (0–15)	14 (44)	13 (41)	Z = -0.024; p = 0.98
Personal Accomplishment (PA)	37.0 (19–48)	37.0 (18–48)	17 (53)	11 ^b (34)	Z = -0.983; p = 0.33
<i>GHQ</i>					
Total	1.0 (0–11)	0.0 (0–7)	9 (28)	12 (38)	Z = -1.654; p = 0.10
Somatic	0.0 (0–5)	0.0 (0–2)	8 (25)	12 (38)	Z = -2.252; p = 0.02
Anxiety	0.0 (0–4)	0.0 (0–4)	6 (19)	8 (25)	Z = -0.572; p = 0.60
Social Dysfunction	0.0 (0–4)	0.0 (0–3)	6 (19)	7 (22)	Z = 0.000; p = 1.00
Depression	0.0 (0–5)	0.0 (0–0)	0	3 (9)	Z = -1.604; p = 0.25

a Results recorded in the + change and – change columns represent the numbers of participants whose score increased for each measure or decreased, respectively. The difference between the sum of the numbers in the + change and – change columns and the total sample of 32 is the number of participants for whom score was unchanged over time (i.e. ties).

b A negative change for this subscale is the desired direction for change, i.e. represents higher Personal Accomplishment. For all other subscales, higher scores reflect higher dysfunction.

4.2. Burnout and psychological morbidity

There were no changes in stress and burnout scores over time. Using a cut-off score of 4 or more on the GHQ, 11 par-

ticipants qualified as 'cases' at T1, compared with five 'cases' at T2. There was a significant reduction in scores on the Somatic subscale over time (see Table 3).

Table 4 – Perceptions of stress and support, attitudes and confidence, median scores (n = 32).

Question	T1 (range)	T2 (range)	Positive change ^a (%)	Negative change ^a (%)	Marginal homogeneity result
<i>Perceived stress and support</i>					
I am satisfied with the amount of support I have outside of work	4.0 (2–5)	4.0 (2–5)	12 (38)	8 (25)	$Z = -0.493$; $p = 0.75$
The level of stress I am facing outside of work	2.0 (1–4)	2.0 (1–4)	8 (25)	9 ^b (28)	$Z = -0.164$; $p = 1.00$
I am satisfied with the amount of support I receive in my work environment	3.0 (1–5)	3.0 (1–5)	6 (19)	12 (38)	$Z = 1.671$; $p = 0.14$
The level of stress I am facing in my work environment	3.0 (1–5)	3.0 (1–5)	9 (28)	11 ^b (34)	$Z = 0.447$; $p = 0.82$
<i>Attitudes</i>					
I believe that being able to talk about emotional issues helps families to cope with cancer	4.0 (2–5)	5.0 (2–5)	10 (31)	6 (19)	$Z = -0.962$; $p = 0.46$
I believe that oncology nurses have an important role in providing emotional support for parents with advanced cancer	5.0 (3–5)	5.0 (3–5)	9 (28)	4 (13)	$Z = -1.500$; $p = 0.21$
I believe that avoiding becoming emotionally engaged with patients with advanced cancer is a helpful way for me to cope emotionally	2.0 (1–5)	1.5 (1–4)	5 (16)	10 ^b (31)	$Z = 1.298$; $p = 0.26$
I reflect on my emotional reactions to the patients in my care	3.0 (1–5)	3.0 (1–5)	12 (38)	9 (28)	$Z = -0.566$; $p = 0.68$
I take an active role in caring for myself emotionally and spiritually	3.0 (1–5)	4.0 (2–5)	13 (41)	5 (16)	$Z = -2.271$; $p = 0.02$
<i>Confidence</i>					
I feel uncomfortable when patients become emotionally distressed	2.0 (1–4)	2.0 (1–4)	6 (19)	6 ^b (19)	$Z = 0.000$; $p = 1.00$
I worry about what to say if patients become emotionally distressed	2.0 (1–5)	2.0 (1–4)	2 (6)	10 ^b (31)	$Z = 2.475$; $p = 0.02$
I am confident in my ability to provide emotional support for parents with advanced cancer	2.0 (1–4)	3.5 (2–5)	22 (69)	1 (3)	$Z = -4.000$; $p \leq 0.001$
I am confident about how to raise discussion of emotional issues with parents with advanced cancer	2.0 (1–4)	3.0 (2–4)	21 (66)	1 (3)	$Z = -4.041$; $p \leq 0.001$
I am confident in my ability to provide information to parents with advanced cancer about ways of talking with their children	2.0 (1–3)	3.0 (1–4)	25 (78)	1 (3)	$Z = -4.500$; $p \leq 0.001$

a Results recorded in the + change and – change columns represent the numbers of participants whose score increased for each measure or decreased, respectively. The difference between the sum of the numbers in the + change and – change columns and the total sample of 32 is the number of participants for whom score was unchanged over time (i.e. ties).

b An increase in negative scores for this parameter is consistent with the aims of the educational intervention, that is, a negative change is the desired outcome, compared with other parameters in which a positive change is the desired outcome after the intervention.

4.3. Perceived stress, attitudes and confidence

There were no significant changes in perception of stress at work or outside work. After the intervention nurses were significantly more likely to report taking an active role in

‘caring for myself emotionally and spiritually’ ($p = 0.02$). There were significant increases in confidence about ability to provide support ($p \leq 0.001$), and information ($p \leq 0.001$), and raise discussion about emotional issues with parents ($p \leq 0.001$) (Table 4).

Table 5 – Frequency of participant responses for each clinical vignette Theme, median scores (n = 32).

Theme		T1 (range)	T2 (range)	Positive change ^a (%)	Negative change ^a (%)	Wilcoxon paired ranks test result
<i>Pragmatic</i>						
Focus on practical issues such as bed-wetting or housework without consideration of emotional issues	Angus	1.0 (0–6)	0.0 (0–2)	4 (13)	20 ^b (63)	$Z = -3.091$; $p = 0.002$
	Mary	2.0 (0–5)	1.0 (0–3)	3 (9)	19 ^b (59)	$Z = -3.053$; $p = 0.001$
<i>Facilitative</i>						
Attempt to assist parent to understand issues facing the child and help parent respond	Angus	1.0 (0–4)	2.0 (0–4)	18 (56)	6 (19)	$Z = -2.174$; $p = 0.03$
	Mary	2.0 (0–4)	1.0 (0–3)	9 (28)	15 (47)	$Z = -1.684$; $p = 0.10$
<i>Supportive</i>						
Provision of direct support by nurse or encouraging accessing support for parent	Angus	0.5 (0–3)	0.0 (0–5)	7 (22)	5 (16)	$Z = -0.284$; $p = 0.83$
	Mary	0.0 (0–2)	0.0 (0–5)	9 (28)	9 (28)	$Z = -0.403$; $p = 0.71$
<i>Referral</i>						
Referral to specialist such as psychologist or social worker	Angus	0.0 (0–2)	0.0 (0–2)	1 (3)	11 ^b (34)	$Z = -2.332$; $p = 0.02$
	Mary	1.0 (0–3)	0.0 (0–2)	3 (9)	14 ^b (44)	$Z = -2.332$; $p = 0.03$
<i>Emotional</i>						
Focus on feelings and importance of expression of emotions for parent and child	Angus	0.0 (0–4)	1.0 (0–5)	12 (38)	6 (19)	$Z = -1.535$; $p = 0.14$
	Mary	0.0 (0–3)	0.0 (0–3)	12 (38)	7 (22)	$Z = -0.613$; $p = 0.59$
<i>Relationship</i>						
Discussion of importance of parent spending quality time with the child	Angus	0.5 (0–2)	0.0 (0–1)	5 (16)	8 (25)	$Z = -1.000$; $p = 0.46$
	Mary	0.0 (0–1)	0.0 (0–1)	5 (16)	2 (6)	$Z = -1.134$; $p = 0.45$
<i>Promoting coping</i>						
Discussion of strategies which have been demonstrated to assist children facing parental death to cope, such as addressing children's guilt about personal contribution to the illness, the need to negotiate rather than impose tasks, to prepare adolescents for parental death	Angus	0.5 (0–4)	1.0 (0–4)	16 (50)	8 (25)	$Z = -2.366$; $p = 0.02$
	Mary	0.0 (0–2)	2.0 (0–9)	23 (72)	1 (3)	$Z = -4.074$; $p \leq 0.001$

^a Results recorded in the + change and – change columns represent the numbers of participants whose score increased for each measure or decreased, respectively. The difference between the sum of the numbers in the + change and – change columns and the total sample of 32 is the number of participants for whom score was unchanged over time (i.e. ties).

^b An increase in negative scores for this parameter is consistent with the aims of the educational intervention, that is, a negative change is the desired outcome, compared with other parameters in which a positive change is the desired outcome after the intervention.

4.4. Clinical vignettes

The defining characteristics of each of the seven themes are presented in Table 5, including the frequency of participants' responses for each theme. The high numbers of pragmatic responses at T1 in which nurses focused on practical concerns suggested that nurses found it difficult to consider the emotional issues facing the family. Over time there were significant reductions in pragmatic responses to the Angus and Mary vignettes ($p = 0.002$; $p = 0.001$, respectively) and recommendation of referral ($p = 0.02$; $p = 0.03$) and significant increases in promoting coping responses ($p = 0.02$; $p \leq 0.001$). This combination of results suggests that after the intervention nurses felt more confident in their ability to actually help the parent, hence they did not have to focus on practical issues or recommend referral as occurred at T1 (Table 5).

4.5. Simulated patient interviews

Seven of the T1 videotapes were unable to be transcribed because of technical problems with the tapes. The T2 scores for participants whose T1 data were unavailable were analysed and compared with the remainder of the T2 scores. There were no significant differences in any category. Comparisons based on complete data sets revealed significant improvements in all categories of communication except for responses to Unscripted Emotional Cues. There was a significant reduction in frequency of blocking responses ($p \leq 0.001$). Results are summarised in Table 6.

4.6. Other analyses

Because of the small sample size, a limited number of analyses were conducted to investigate associations between subgroups in the study. Nurses who had high Emotional Exhaustion (score of 27 or over) at recruitment were significantly more likely than nurses without high Emotional Exhaustion to have low confidence ('Not at all' or 'A little') in ability to provide support for parents ($\chi^2 = 6.882$; $p = 0.015$), and a low degree ('Not at all' or 'A little') of initiative in self-care strategies ($\chi^2 = 7.778$; $p = 0.013$). Nurses aged 40 years or younger had high ('A lot' or 'Extremely') worry about what to say when patients were distressed ($\chi^2 = 5.042$; $p = 0.041$) but there were no other significant associations between younger age and confidence or attitudes. Nurses who had experienced bereavement were significantly less likely to score as 'cases' on the GHQ ($\chi^2 = 7.098$; $p = 0.012$).

4.7. Acceptability survey

Despite reminder letters being sent, the acceptability survey was only completed by 17 nurses. Generally the nurses found the training acceptable. Results are summarised in Table 7.

Qualitative responses were dominated by themes of increased confidence, and recognition that support does not necessarily involve solving patient's problems, typified by this comment:

'It has allowed me the freedom to realise that I am not expected to have all the answers for peoples' emotional responses. It is fine to say nothing and listen to them instead.'

Table 6 – Ratings for video-taped interview scripted cues and interactional skills, mean scores.

Category (highest score possible) [subcategory]	T1 (range) [SD]	T2 (range) [SD]	Positive change ^a (%)	Negative change ^a (%)	Wilcoxon paired ranks test result
Responding to patient downplaying her concerns (9) [SC1–SC3] $n = 20^c$	5.65 (3–8) [1.33]	7.13 (5–9) [1.28]	15 (75)	3 (15)	$Z = -3.119$; $p = 0.001$
Responding to patient's distress (9) [SC4–SC6] $n = 16^c$	5.88 (4–9) [1.59]	7.22 (3–9) [1.62]	12 (75)	2 (13)	$Z = -2.940$; $p = 0.002$
General interactional skills (12) [GC1–GC4] $n = 24^c$	8.14 (5–12) [1.98]	9.97 (6–12) [1.54]	17 (71)	2 (8)	$Z = -3.534$; $p \leq 0.001$
Discussing specific needs of daughters (9) [GC5–GC7] $n = 24^c$	5.68 (3–9) [1.74]	7.35 (5–9) [1.38]	18 (75)	2 (8)	$Z = -3.623$; $p \leq 0.001$
Response to Unscripted Emotional Cues (3) $n = 22^c$	2.14 (1–3) [0.64]	2.43 (0–3) [0.66]	11 (50)	8 (36)	$Z = -0.967$; $p = 0.35$
Blocking (frequency) $n = 24^c$	1.68 (0–5) [1.57]	0.32 (0–2) [0.59]	2 (8)	15 ^b (63)	$Z = -3.319$; $p \leq 0.001$

^a Results recorded in the + change and – change columns represent the numbers of participants whose score increased for each measure or decreased, respectively. The difference between the sum of the numbers in the + change and – change columns and the total sample is the number of participants for whom score was unchanged over time (i.e. ties).

^b An increase in negative scores for this parameter is consistent with the aims of the educational intervention, that is, a negative change is the desired outcome, compared with other parameters in which a positive change is the desired outcome after the intervention.

^c The sample size in categories varies because in some interviews Scripted Cues were omitted, or other emotional cues were not given, and only complete data sets were analysed.

Table 7 – Satisfaction with different aspects of training (n = 17).

Satisfaction item	Number of nurses responding 'A lot' or 'Extremely' n (%)
The educational manual was easy to use	14 (82)
The content of the educational manual was relevant	15 (88)
The educational manual was suitable for my learning needs	14 (82)
I found the reflective exercises helpful	12 (71)
I found the clinical problem-solving exercises helpful	11 (65)
This training has enhanced my clinical work	11 (65)
I felt anxious at the beginning of the communication skills training workshop	5 (29)
I found participation in the communication skills training workshop confronting	7 (41)
I felt supported during the communication skills training workshop	14 (82)
I found the role-plays in the communication skills training workshop helpful	15 (88)
The length of the communication skills training workshop was acceptable	15 (88)

5. Discussion

Communication skills training for clinicians is typically evaluated by means of audio-taped or video-taped consultations with simulated patients aimed at approximating a normal clinical interview.¹⁷ Clinical contact for nurses is different, with repeated brief contacts, some initiated by the patient (such as request for analgesia) others initiated by nurses performing particular cares.²² Much supportive care is thus offered in 'snatches' and moments of opportunity not scheduled or even anticipated. Hence to evaluate nursing communication skills an approach clearly related to the nurse–patient encounter is useful,²² and addition of a qualitative approach can yield data not obtainable by other methods.²³ In this case, supplementing even brief interviews with the qualitative approach in the vignettes revealed profound post-training changes.

Longer and more intensive training has the potential for substantial gains in skills.²⁴ However, an intensive format may not be sustainable in all workplaces. In this intervention, inclusion of reflective and problem-solving exercises in the self-directed educational manual encouraged nurses' application of knowledge to clinical contexts, hence the face-to-face workshop could build on these increased insights and knowledge. This approach makes training more flexible with potential to be delivered in a variety of settings without extensive disruption to work schedules.

Nurses' lack of confidence in their ability to provide supportive care can lead to avoidance of patients¹³; hence attention to professional confidence must underpin efforts to enhance the communication and supportive care skills of nurses. The results of this study are similar to others demonstrating increased self-efficacy after communication skills training.²⁵ In this study nurses' increased confidence appears justified, as evidenced by improvements in skills in the video-taped interviews, and the dramatic post-training changes in responses to the vignettes, in particular reduction in focus on the pragmatic issues (which could be construed as blocking), fewer recommendations for referral, and increased provision of evidence-based information for parents about strategies to promote optimal adjustment for their child.

There is a global shortage of qualified oncology nurses, likely to get worse as many nurses report that they are emo-

tionally drained from their work, and feel that they are working too hard.²⁶ Focus groups conducted as a prelude to this study revealed that the provision of emotional support for patients posed a burden which was little acknowledged,¹³ and this may have been a factor underpinning anxiety prior to the workshop. The association between high Emotional Exhaustion and low confidence in the supportive care role further highlights the importance of attention to the emotional dimensions of communication for nurses, a topic included in the educational manual. It also points to the need for skilled facilitators capable of supporting participants in workshops.

Research in communication in cancer care requires a planned approach in which the difficulties are defined, the views of clinical service providers sought, best practice identified and interventions developed, so that their effectiveness can be determined prior to dissemination and adoption of the intervention.²⁷ This study built on feedback from nurses, was informed by awareness of the clinical context in which nurses worked, and incorporated strategies to assist with translation of learning into clinical practice by helping nurses to identify factors likely to impede effective communication. This was a small self-selected group of nurses who were presumably enthusiastic about psychosocial issues, and absence of a control group means that the results cannot necessarily be generalised to all oncology nurses. However, the results of this pilot study are encouraging, and point to the potential for nurses to gain increased confidence, knowledge and skills through a flexible educational intervention without this posing a burden in terms of stress and burnout or psychological morbidity. This innovative approach to education merits wider implementation and evaluation of the impact for those who really count – parents coping with advanced cancer and their children.

Conflict of interest statement

None declared.

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