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ORIGINAL ARTICLE / *ARTICLE ORIGINAL*

How Fast Can Nurses Learn Therapeutic Communication Skills? A Pilot Study on Brief Hypnotic Communication Training Conducted with Oncology Nurses

À quelle vitesse les infirmières peuvent-elles apprendre les techniques de communication thérapeutique ? Une étude pilote sur une brève formation à la communication hypnotique menée auprès d'infirmières en oncologie

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Abstract *Objective*: This project aimed to train nurses on an oncology unit in hypnotic communication to reduce treatment-related pain and anxiety in their patients. A pilot study was conducted to assess changes in hypnotic communication behaviors associated with the training.
Methods: Nurses were recruited and their interactions during a simulated patient admission for treatment (before and after training) were recorded. Hypnotic communication skills were assessed by independent reviewers using a training checklist listing different hypnotic communication techniques and a validated assessment scale (Sainte-Justine Hypnotic Communication Assessment Scale, SJ-HCAS).
Results: Seven nurses were evaluated. Wilcoxon paired-sample tests (pre–post) reported significant improvement with large effect sizes in the total score of the training grid ($P = 0.034$, $r = 0.832$) and significant improvement with large effect sizes in the relational ($P = 0.018$, $r = 0.930$) and total ($P = 0.021$, $r = 0.903$) scores of the SJ-HCAS.
Conclusion: This pilot study shows promising results regarding the effectiveness of hypnotic communication training for nurses. These acquired skills could translate into improved treatment experience with patients and could be transferred to other professionals and settings in the health care system.

Keywords Nursing education · Oncology nursing · Hypnosis · Communication · Experiential learning

Résumé *Objectif* : Ce projet visait à former les infirmières d'une unité d'oncologie à la communication hypnotique afin qu'elles puissent réduire la douleur et l'anxiété liées au traitement chez leurs patients. Une étude pilote a été menée pour évaluer les changements de comportement dans la communication hypnotique associés à la formation.
Méthodes : Des infirmières ont été recrutées et leurs interactions au cours d'une simulation d'admission d'un patient pour un traitement (avant et après la formation) ont été enregistrées. Les compétences en communication hypnotique ont été évaluées par des examinateurs indépendants à l'aide d'une grille de formation listant les différentes techniques de communication hypnotique et d'une grille d'évaluation validée (SJ-HCAS).
Résultats : Sept infirmières ont été évaluées. Les tests de Wilcoxon sur échantillons appariés (pré–post) ont rapporté une amélioration significative avec une grande taille d'effet

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dans le score total de la grille de formation ($p = 0{,}034$, $r = 0{,}832$) et une amélioration significative avec une grande taille d'effet dans les scores relationnels ($p = 0{,}018$, $r = 0{,}930$) et total ($p = 0{,}021$, $r = 0{,}903$) de la SJ-HCAS.
Conclusion : Cette étude pilote montre des résultats prometteurs concernant l'efficacité de la formation à la communication hypnotique pour les infirmières. Ces compétences acquises pourraient se traduire par une amélioration de l'expérience de traitement avec les patients et pourraient être transférées à d'autres professionnels et à d'autres cadres du système de soins de santé.

Mots clés Formation en soins infirmiers · Soins infirmiers en oncologie · Hypnose · Communication · Apprentissage expérientiel

Introduction

Cancer is known not only for its physiological symptoms and treatment side effects but also for associated psychosocial risks [1–3]. Indeed, research has shown that cancer patients are more likely to develop psychiatric disorders, the most common being depression and anxiety [4,5]. These patients may be at high risk of experiencing more pain related to cancer or its treatment. They are also more likely to have significantly altered mood levels, given the overlap of cancer pain and anxiety symptoms [6]. To support these patients in these troubles, preventive strategies should be developed, which would help to avoid this complexification of the patient's psychological condition. Oncology nurses have a key role to play on this level [7].

Nursing communication is important in oncology and a target for continuing education initiatives. When oncology nurses have strong communication skills, they play a pivotal role in influencing patient satisfaction, treatment adherence, and clinical outcomes [8]. To this end, hypnotic communication is very effective in improving anxiety management as well as reducing fatigue and discomfort during cancer-related treatments [9,10]. Briefly, hypnotic communication is a simple form of direct conversation inspired by the language principles of clinical hypnosis where the clinician uses a low voice timbre, repetitions, and metaphors to redirect the patient's attention from the source of stress to soothing mental images [11]. Although this technique is derived from formal hypnosis, it nevertheless does not induce an altered state of consciousness [12].

In the last years, we conducted the first feasibility study on hypnotic communication with pediatric oncology nurses and their patients. The results showed favorable effects in terms of reducing distress and pain in a pediatric day hospital [13]. As a continuation of this project, we recently researched another group of oncology nurses working with adult patients in the administration of hypnotic communication [9]. Our results showed that patients exposed to hypnotic communication during cancer treatment reported significantly fewer physical symptoms and felt more relaxed during their treatment compared to patients who received standard care. As part of that specific study, oncology nurses involved in the research were provided with a brief training in hypnotic communication before protocol initiation. Here, we aimed to report how fast these oncology nurses were able to learn hypnotic communication skills during the brief training session.

Method

Participants and procedures

A pilot study was conducted at the Oncology Day Clinic at Hôpital du Sacré-Cœur (Montreal, Quebec, Canada). The study was based on the experiential learning theory of Kolb [14].

The study design was presented at a meeting between the research team and the nursing staff of the Sacré-Coeur Oncology Day Clinic. Following this meeting, nurses volunteered for this training in order to be better equipped to reduce pain and distress in their patients and were included in the study.

A convenience sample of 10 registered nurses working full-time at the outpatient oncology and with no previous experience of hypnotic communication or a related technique was recruited. They were invited to participate in a hypnotic communication training and to participate in an evaluation of the skills acquired during this training using a video-recorded simulation that will be coded by two observation scales. Given the study's exploratory nature, neither sample size calculation nor power analysis was performed. Data concerning gender, age, educational level, and years of experience as a nurse were collected. The training took place in October 2020 and the interview scoring was conducted from June 2021 to August 2021. The project was approved by the Institutional Ethics Committee. Written informed consent was obtained before study initiation.

Training in hypnotic communication

An 8-h training session on hypnotic communication was developed and provided by a licensed psychologist in collaboration with a physician in palliative care (both with certification in clinical hypnosis). The training is based on the hypnosis interventions usually proposed in psycho-oncology [15] and consisted of four sessions administered over 1 day focusing on theoretical and practical aspects of hypnotic communication (see Fig. 1). Session 1 addressed general

Sessions	Program
1-Communicating in care	1. Define the communication communication 2. Introduce aspects of non-verbal communication 3. Train in relational techniques of therapeutic communication • Synchronization technique • Verbal principles of hypnotic communication • Reframing technique
2-Be creative in communication	1. Introduce the concept of creativity in communication 2. Introduce the concept of suggestion 3. Use direct suggestion 4. Practice metaphors
3-Change patient perception	1. Introduce the pleasant place technique 2. Training in the VAKOG technique
4-Apply to the clinic	1. Provide practical application to the clinical setting 2. Practice a full hypnotic communication script 3. Evaluate participants' skill acquisition

Fig. 1 Hypnotic communication program

principles of relational techniques — namely, synchronization — as well as nonverbal and paraverbal communication. Session 2 focused on creativity in communication and introduces the concepts of direct and metaphorical suggestions. Session 3 focused on learning the guided imagery technique, which suggests that patients put themselves in a safe place. Finally, session 4 provided participants with a practical implementation scenario and allowed for evaluating the acquisition of techniques learned during the training. To facilitate the adoption of the technique by nurse participants, excerpts from lectures, demonstrations, and supervised exercises simulating the administration of hypnotic communication in the context of a nurse–patient interaction during cancer treatment were used in a cyclical process as proposed by Kolb's experiential learning theory [14]. All exercise simulations were video recorded for rating purposes.

Measures

Nurses' verbal and nonverbal hypnotic communication behaviors were assessed independently by two external observers at two time points: pre-training and post-training (same day). Communication behaviors recorded during videotaped nurse encounters were coded using the Sainte-Justine Hypnotic Communication Assessment Scale (SJ-HCAS) [16]. The scale is based on 11 core items of hypnotic communication to prevent patient pain and distress related to oncology treatments. For each item, a score of 0 (absent behavior) or 1 (present behavior) is attributed, with a total score ranging from 0 to 11.

Nurse individual performance was measured through a dichotomous 20-item training grid based on the hypnotic communication skills that were targeted by the objectives of the training session. The grid assesses four behavioral subscales with a score of 0 (objective not met) or 1 (objective met), including (a) nonverbal communication (seven items, range = 0–7), (b) paraverbal communication (five items, range = 0–5), (c) verbal communication (four items, range = 0–4), and (d) technique used (four items, range = 0–4), for a total ranging from 0 to 20.

Analyses

Statistical analyses were performed using RStudio software (version 4.1.3). Given the small sample size, nonparametric Wilcoxon signed-rank tests were performed to document changes in participants' hypnotic communication skills before and after training. The effect size of each Wilcoxon test was obtained separately in R.

Results

Participants

Seven nurses out of the 10 participants participated in the evaluations of this study. Participants were mostly female (six women and one man). The majority of the respondents were 50 to 59 years old (43%); 43%s had less than 10 years of experience in oncology.

Achievement of training objectives

Results showed a significant improvement in total hypnotic communication skill acquisition score ($P = 0.034$) between pre-training ($M = 42.15$, $SD = 10.35$) and post-training ($M = 62.14$, $SD = 11.13$), with a large effect size ($r = 0.832$). No difference for the other subscale scores was found, although large effect sizes associated with pre–post training changes for nonverbal ($P = 0.057$, $r = 0.816$) and paraverbal skills ($P = 0.054$, $r = 0.819$) were documented. Changes associated with other skills had moderate effect sizes: verbal ($P = 0.345$, $r = 0.407$) and technical ($P = 0.203$, $r = 0.484$). Results are summarized in Table 1.

Acquisition of hypnotic communication techniques

Results on the SJ-HCAS showed significant pre–post training differences with large effect sizes for the relational ($P = 0.018$, $r = 0.930$) and total ($P = 0.021$, $r = 0.903$) SJ-HCAS scores. All scores had large effect sizes (relational, technical, and total scores), but the pre–post difference in technical scores was nonsignificant ($P = 0.054$, $r = 0.819$). Results are summarized in Table 2.

Table 1 Scores on the evaluation grid for the achievement of training objectives

Scores	Pre-training		Post-training		Pre–post comparison (Wilcoxon *T*)	
	M (%)	*SD* (%)	*M* (%)	*SD* (%)	*P*	Effect size, *r*
Nonverbal	67.35	13.59	85.71	8.25	0.057	0.816
Paraverbal	45.71	15.12	68.57	15.74	0.054	0.819
Verbal	21.43	17.25	32.14	12.20	0.345	0.407
Technique	14.29	19.67	42.86	42.61	0.203	0.484
Total	42.14	10.35	62.14	11.13	0.034*	0.832

M = mean; *SD* = standard deviation; *$P < 0.05$

Table 2 Scores from SJ-HCAS

Scores	Pre-training		Post-training		Pre–post comparison (Wilcoxon *T*)	
	M (%)	*SD* (%)	*M* (%)	*SD* (%)	*P*	Effect size, *r*
Relational	65.71	19.02	91.43	15.74	0.018*	0.930
Technique	39.29	31.81	75.00	25.00	0.054	0.819
Total	54.00	24.62	84.14	18.17	0.021*	0.903

SJ-HCAS = Sainte-Justine Hypnotic Communication Assessment Scale; *M* = mean; *SD* = standard deviation; *$P < 0.05$

Discussion

This pilot study aimed to explore whether oncology nurses could develop observable skills in hypnotic communication following brief training. Acquisition of relational and technical aspects of hypnotic communication was assessed after a condensed 8-h training with an audience of adult oncology nurses. Although preliminary, the overall results suggest that the nurse participants significantly improved their hypnotic communication skills during training.

More specifically, significant improvements in overall hypnotic communication were observed between pre- and post-training, with a large effect size. Although nonverbal and paraverbal scores also had large effect sizes, they did not reach statistical significance. In the context of a pilot study, nonsignificant scores with large effect sizes do not allow us to determine whether the population-wide effect size is truly large or not. We can say, however, that the training provided has great potential to lead to observable improvements in participants' nonverbal, paraverbal, verbal, and technical skills as done in a larger prior study [10,13].

Another result showed that verbal and technical skill scores in the training were not significantly improved between pre- and post-training. This result should be interpreted with caution. Indeed, oncology nurses are naturally inclined to demonstrate patience and empathy toward their patients, as shown in several studies [17,18]. In this context, training would certainly validate and even formalize the important parameters in this type of intervention, that is, their posture (nonverbal) and the flow of their voice (paraverbal). Conversely, the techniques that have been taught, as well as their protocols, are new to nurses and would require more time to be mastered. Accordingly, when these same nurses were interviewed about their real-life clinical experiences with hypnotic communication following the brief training, they were unanimous that the training received was not sufficient to fully master the method [19]. To this end, studies conducted on this technique recommend spreading this training over a minimum of 2 days, emphasizing practical exercises to reinforce these verbal and technical skills in the participants. Recommendations are also made to promote ongoing supervision beyond the training sessions, to best encourage participants to use the techniques in their practice [20].

Finally, the significance of the pre–post change in the total score observed on the validated SJ-HCAS was fairly consistent with the results obtained from the training grid, which may demonstrate a good fit between these two measures. As for the significance of the SJ-HCAS relational scale and the discordance with the results of the training grid (nonverbal, paraverbal, and verbal skills are relational and were nonsignificant), it could lead one to believe that the training grid is more precise, detailing each behavior in more depth than the SJ-HCAS grid. It also suggests that even if a participant did not meet all of the criteria for nonverbal, paraverbal, and verbal skills during training, he or she still

managed to use the relational skill as a whole during a simulated situation, as demonstrated in previous studies [10,11].

Limitations

This is a small local study at one university-affiliated outpatient oncology clinic, which may not allow for generalizability to other settings. Furthermore, training and skills assessment were completed in only 1 day, which means that the results obtained could have changed over time. Longitudinal data collection would have made it possible to determine whether skills are consolidated with practice or reduced as nurses' habits take over the new knowledge with time.

Conclusion

This study is the first to evaluate a brief hypnotic communication training session for practicing nurses in adult oncology care. The results show a promising potential for this type of condensed training for nursing continuing educational programs and good prospects for the development of communication skills in oncology nursing. Such continuing educational programs could also be extended to nononcology nurses working with cancer survivors in different health care settings. With further validation, hypnotic communication training could eventually become an integral part of nursing orientation programs in oncology, with potential soothing benefits for patients experimenting with anxiety and other overwhelming emotional experiences during cancer treatments. This pilot study provides a preliminary framework to support nurse educators in this emerging specialty area in oncology.

Links of interest : Authors declared having no links of interest

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