RESEARCH ARTICLE

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# Status and Correlates of Pediatric Oncology Nurses' Practice Therapeutic Communication Skills with Patients and Family Caregivers



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#### Abstract:

Introduction: Communication skills of nurses in pediatric oncology units are considered a prominent competency that plays a vital role in the care process. Effective communication enhances information exchange, promotes the emotional well-being of caregivers, and improves the decision-making process. This study aimed to assess the competency of pediatric oncology nurses in practicing therapeutic communication skills and to examine differences in competency among nurses in the West Bank, considering demographic and personal factors.

*Methods:* A descriptive-correlational study was conducted in two pediatric oncology units in two accredited hospitals. A self-administered questionnaire, utilizing the Communication Assessment Tool (CAT), was used to collect data from 39 pediatric oncology nurses. Data collection was from April to June 2025.

**Results:** Nurses demonstrated moderately strong communication skills, with a mean total score of 3.84 (SD = 0.46) on the Communication Assessment Tool (CAT). The highest-rated behaviors were treating patients with respect, showing care and concern, and attentively listening, while the lowest-rated items involved encouraging questions, involving patients in decisions, and discussing follow-up plans. No statistically significant associations were found between communication scores and demographic or professional variables.

**Discussion:** Oncology nurses are struggling to provide quality care, despite several interfering factors related to disease and treatment processes of children with cancer. This makes using the appropriate therapeutic techniques an essential tool to improve healthcare outcomes.

**Conclusion:** Pediatric oncology nurses perceive their communication with patients and parents as moderately good. Nurses demonstrated that they treat patients with respect, show care and concern, and attend to patients' needs to facilitate effective and compassionate communication. However, they need to develop the skills of engaging parents and children in decision-making, encouraging questions, and discussing next steps.

**Keywords:** Pediatric oncology, Nursing, Communication skills, Competency, Therapeutic communication, Nursepatient communication, Decision-making.

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#### 1. INTRODUCTION

Effective communication is a cornerstone of quality care in pediatric oncology, shaping the well-being of children with cancer, their families, and the nurses who care for them [1]. Oncology nurses (ON) use communication not only to exchange information, thoughts, and feelings but also to foster mutual understanding and build trust. Evidence shows that poor communication increases patient and family distress, leading to anxiety, depression, and hopelessness, whereas effective communication supports patient adjustment, strengthens coping, and reduces the risk of misinformation or treatment abandonment [2, 3]. For this reason, therapeutic communication is recognized as a fundamental nursing competency in pediatric oncology.

Communication in pediatric oncology is uniquely complex. Children's developmental stages require age-appropriate strategies that consider cognitive and emotional maturity [4, 5]. Interactions are often triadic, involving the child, parents, and healthcare team, which can lead to disagreements between parents and providers on how much information to share [6]. Cultural and religious factors add further challenges. In Arab and Islamic contexts, families may shield the child from the whole truth of a diagnosis or avoid open discussions of prognosis and end-of-life, fearing that such conversations diminish hope or increase distress [7-9]. These dynamics require nurses to practice culturally sensitive, case-specific communication that balances honesty, compassion, and family preferences.

Despite its central importance, communication in pediatric oncology has received little research attention in Palestine, where cancer-related studies remain limited relative to disease burden [10]. Within the West Bank, systemic challenges, including staff shortages, restricted medical resources, and ongoing political instability, further complicate the delivery of high-quality care [11-13]. Under such conditions, effective nurse and patient-family communication is often the key to sustaining trust, alleviating emotional distress, and ensuring continuity of care [14]. Addressing this gap is therefore critical. This study aims to assess the status of therapeutic communication skills among pediatric oncology nurses in the West Bank and to examine how these competencies vary in relation to demographic and personal characteristics, providing baseline evidence to inform culturally relevant training and policy interventions.

#### 2. MATERIALS AND METHODS

## 2.1. Study Design

This study used a descriptive-correlational design. Data were collected from nurses working in pediatric oncology units in the West Bank to assess their communication skills and explore associations with demographic and professional characteristics, using a self-administered questionnaire based on the Communication Assessment Tool (CAT) [15]. Data were collected from April to June 2025.

# 2.2. Setting

The study was conducted in the pediatric oncology units of two representative non-profit specialist hospitals in the

West Bank, Palestine. These hospitals were selected because they are accredited by the Joint Commission International (JCI), ensuring adherence to international standards of care. Both hospitals provide the same level of specialized oncology services, manage similar types of pediatric cancer cases, and have dedicated units for children with cancer. Their comparable structures and care protocols made them ideal settings for assessing communication practices among pediatric oncology nurses, allowing for consistency and reliability in data collection.

# 2.3. Study Sample

The study population consisted of pediatric oncology nurses working in the West Bank, Palestine. A census sampling technique was employed to recruit all eligible pediatric oncology nurses from the target hospitals. Nurses were excluded if they had less than six months of experience working in pediatric oncology departments at the time of data collection. A total of 39 nurses met the inclusion criteria and were invited to participate in the study. All eligible nurses participated in the survey, resulting in a 100% response rate.

# 2.4. Study Instrument

A demographic profile was developed by the researchers to capture key individual characteristics of the participating pediatric oncology nurses. This profile included variables, such as years of experience in pediatric oncology, the highest level of education attained, and the extent of training and education in communication skills, with oncology patients. Therapeutic particularly skills were communication assessed using Communication Assessment Tool (CAT) [15]. For this study, the Arabic version of the CAT, as adapted and validated previously [16], was used. CAT is a validated instrument designed to measure the communication between clinicians and patients across various healthcare settings and specialties. The CAT consists of 15 items rated on a 5-point scale: 1 = poor, 2 = fair, 3 = good, 4 = very good, and 5 = quad scaleexcellent. Consistent with previous studies, results from the CAT were reported as the percentage of "excellent" (score = 5) responses, in line with the original scoring method. CAT has demonstrated strong internal consistency, with a reported Cronbach's alpha of 0.91.

# 2.5. Data Collection and Ethical Consideration

Ethical approval was obtained from the Institutional Review Board (IRB) of An-Najah National University (Approval Code: Nurs. March 2025/10, dated March 4, 2025), as well as from the institutional ethics committees of the participating hospitals where data collection took place. The heads of the continuous education department served as liaisons to facilitate contact with nurses. Prior to participation, explicit written informed consent was obtained from all pediatric oncology nurses. During the consent process, participants were fully informed about the study's objectives, procedures, potential risks and benefits, confidentiality measures, and the anonymization of all collected data. To ensure participant confidentiality, all surveys were distributed by the researchers in sealed envelopes and returned in the same manner. No identifying

information was recorded, and all data were handled with strict adherence to ethical research standards.

# 2.6. Data Analysis

Data were analyzed using the software IBM-SPSS (Version 26). Descriptive statistics were used to summarize the demographic and professional characteristics of the participating nurses, including means and standard deviations for continuous variables and frequencies and percentages for categorical variables. CAT responses were analyzed by calculating the mean and standard deviation for each item, consistent with methods used in previous studies [15, 16]. To examine the associations between nurse characteristics and communication scores, inferential analyses, including independent samples t-tests, one-way ANOVA, and Pearson correlations, were carried out. *p*-values of < 0.05 were considered statistically significant results.

## 3. RESULTS

#### 3.1. Descriptive Statistics

The study involved 39 pediatric oncology nurses working at two nonprofit hospitals in the West Bank. Table 1 indicates that the majority of participants were women (84.6%, n = 33). The nurses ranged in age from 23.0 to 58.0 years, with an average age of approximately 31.69 years (SD = 8.56). The majority held a bachelor's degree in nursing (79.5%, n = 31), while 15.4% (n = 6) had a master's degree or higher, and 5.1% (n = 2) had a diploma. In terms of marital status, 64.1% (n=25) were married, 33.3% (n=13) were single, and one participant was divorced. Their overall nursing experience varied widely from 1.0 to 31.0 years (mean = 9.10, SD = 8.02), while their specific experience in pediatric oncology ranged from 1.0 to 21.0 years (mean = 6.67, SD = 5.30). Most of the nurses (92.3%, n = 36) worked as staff nurses; the rest held roles as coordinators (5.1%, n = 2) or administrators (2.6%, n = 1).

# 3.2. Professional Satisfaction, Training, and Communication Impact

Table 2 represents that the majority of nurses reported high satisfaction with being a pediatric oncology nurse, with 66.7% (n=26) stating they were "satisfied" and 25.6%

(n=10) stating they were "neutral satisfied." Only one nurse reported being dissatisfied. Regarding professional development, 66.7% (n=26) of the participants had attended workshops or continuing education programs in pediatric oncology. However, only 5.1% (n=2) had received formal training specifically in communication skills for working with pediatric oncology patients. Despite this, many nurses felt capable when it came to communication; 64.1% (n=25) said they were "confident," and 12.8% (n=5) said they were "very confident" when interacting with parents. Another 23.1% (n=9) felt neutral. All participants acknowledged that communication plays an important role in parent satisfaction with nursing care; 53.8% (n=21) believed it had a significant impact, 41.0% (n=16) believed the impact was very significant, and only 5.1% (n=2) thought it had a moderate effect.

# 3.3. Nurses' Competency in Practicing Effective Communication Skills

Nurses' competency in practicing effective communication skills was measured using the 15-item Communication Assessment Tool (CAT), as presented in Table 3. Overall, the nurses demonstrated moderately good communication skills, as their average total CAT score was 3.84 out of 5 (SD = 0.46), indicating that, on average, nurses perceived themselves as exhibiting positive communication behaviors. For example, the nurses demonstrated the highest mean score (4.26, SD =0.64) when treating the patient with respect. Similarly, nurses were rated very well on "showed care and concern about patient" (mean 4.15, SD = 0.59) and paying attention to the patient (e.g., "paid attention to patient, looked at him, listened carefully", mean 4.03, SD = 0.71). In contrast, the lowest rated behavior was involving the patient/parent(s) in decisions to the extent they wanted (mean 3.33, SD = 0.66). In addition, lower-scoring items included "encouraged patient to ask guestions" (mean 3.64, SD = 0.58) and "discussed next steps, including any follow-up plans" (mean 3.67, SD = 0.62). This indicates that nurses excel at showing respect, concern, and attentive listening. However, a greater emphasis on encouraging questions, involving patients in care decisions, and clear follow-up discussions could further enhance communication quality.

Table 1. Demographic or personal characteristics of pediatric oncology nurses (N=39).

Variable	-	n	%
Gender	Female	33	84.6
Gender	Male	6	15.4
	Diploma	2	5.1
Educational Level	Bachelor Degree	31	79.5
	Master's Degree or Higher	6	15.4
	Single Never	13	33.3
Marital Status	Married	25	64.1
	Divorced	1	2.6
What is Your Primary Position?	Staff Nurse	36	92.3
	Nurse Coordinator	2	5.1
	Nurse Administrator	1	2.6

Table 2. Professional satisfaction, training, and communication impact of pediatric oncology nurses (N=39).

Variable	-	n	%
How Satisfied are you with being a pediatric oncology nurse?	Dissatisfied	1	2.6
	Neutral	2	5.1
	Satisfied	26	66.7
	Very Satisfied	10	25.6
Did you receive workshops or CEP related	No	13	33.3
to pediatric oncology nursing?	Yes	26	66.7
Did you receive formal training or education regarding communication skill for pediatric oncology patients?	No	37	94.9
	Yes	2	5.1
How confident are you in your current	Neutral	9	23.1
communication skills when interacting with parents of pediatric oncology patients?	Confident	25	64.1
	Very Confident	5	12.8
To what extent do you believe effective	Moderately	2	5.1
communication skills impact parents' satisfaction with nursing care?	Significantly	21	53.8
	Very Significantly	16	41.0

Abbreviation: CEP: Continuing Education Program.

Table 3. Descriptive statistics of pediatric oncology nurses' competency in practicing effective communication skills (N = 39).

-	Items	M	SD
1.	Greeted the patient in a way that made him feel comfortable.	3.92	0.66
2.	Treated patient with respect.	4.26	0.64
3.	Showed interest in the patient's ideas about his health.	3.79	0.70
4.	Understood the patient's main health concerns.	3.72	0.69
5.	Paid attention to the patient (looked at him, listened carefully).	4.03	0.71
6.	Let the patient talk without interruptions.	3.90	0.68
7.	Gave patient/parents as much information as they wanted.	3.79	0.77
8.	Talked in terms that the patient/parents could understand.	3.97	0.67
9.	Checked to be sure that the patient/parents understood everything.	3.79	0.73
10.	Encouraged patient/parents to ask questions.	3.64	0.58
11.	Involved the patient/parents in decisions as much as he wanted.	3.33	0.66
12.	Discussed next steps with patient/parents, including any follow-up plans.	3.67	0.62
13.	Showed care and concern for the patient.	4.15	0.59
14.	Spent the right amount of time with the patient.	3.67	0.81
15.	The nursing staff treated the patient with respect.	3.97	0.81
Total score		3.84	0.46

# 3.4. Differences Related to Practice Communication Skills and Demographic or Personal Characteristics

Regarding the differences in competency to practice therapeutic communication skills in relation to demographic or personal characteristics, the bivariate analysis (Table 4) examined multiple variables, including gender, age, years of nursing experience, years of pediatric oncology experience, educational level, marital status, primary job position, attendance at workshops or continuing education programs, and receipt of formal communication training. The results revealed that none of these factors showed a statistically significant association with the total communication score, as all p-values for group comparisons and correlations were greater than 0.05. This indicates no strong evidence of any factor influencing the nurses' communication skills.

# 4. DISCUSSION

Oncology nurses face challenges in providing quality care due to various factors related to the disease and treatment processes of children with cancer. This makes the use of appropriate therapeutic techniques essential for improving healthcare outcomes. In this study, the findings showed that oncology nurses have moderate confidence in their communication competency. Such a moderate level indicates that they are able to identify and apply appropriate techniques when communicating with children with cancer and their parents. The highest-rated communication skills were treating patients with respect, showing care and concern, and attending to patients' needs. This suggests that nurses focus largely on the caring aspect, assuming that such behaviors and skills enhance trust, foster collaboration, and improve patient well-being.

Table 4. Communication skills total score and demographic data relation/correlation (N=39).

	D ANOVA E
•	Pearson r, t-test, or ANOVA Test
Age (Years)	r = 0.160, <i>p</i> -value = 0.314
Years of Experience as a Nurse	r = 0.185, <i>p</i> -value = 0.260
Years of Experience as a Pediatric Oncology Nurse	r = 0.199, $p$ -value = 0.225
Gender	t = -1.452, $p$ -value = 0.155
Have you ever attended workshops or CEP related to pediatric oncology nursing?	t = -0.683, $p$ -value = $0.499$
Did you receive formal training or education regarding communication skills for pediatric oncology patients?	t = -1.581, p-value = 0.122
Primary position	F= 1.104, <i>p</i> -value= 0.343
Educational level	F= 0.000, <i>p</i> -value = 1.00
Marital status	F= 2.169, <i>p</i> -value = 0.129

**Note:** *p*-values < 0.05, CEP: Continuing Education Program.

The literature also emphasizes this notion, noting that nurses use caring behaviors to build trust with patients and consider caring as a cornerstone of nursing practice and the nurse-patient relationship [17, 18]. Similar findings in acute care contexts have shown that patients highly value respect and empathy from nurses, suggesting that these behaviors are universally recognized as fundamental to quality care [19].

However, the study revealed important gaps in areas linked to information sharing, shared decision-making, and future care planning. These lower-scoring domains indicate challenges in actively engaging patients and families in collaborative care discussions. International research confirms that while nurses excel in relational aspects of communication, they often struggle with structured engagement and decision-sharing [19, 20]. In the Palestinian context, several factors may help explain this pattern. First, cultural norms and professional hierarchies in Arab healthcare systems tend to prioritize physician authority in decision-making. Nurses may defer to physicians out of respect for established hierarchies, perceiving that their role is primarily supportive rather than participatory in nature. Second, time pressures and high patient workloads in under-resourced Palestinian hospitals may discourage lengthy conversations that shared decisionmaking often requires. Engaging families in questioning and planning can extend interactions beyond what is feasible during busy shifts, especially when staffing shortages are chronic. Third, the absence of structured communication protocols or formal training programs leaves nurses without clear guidance on how to invite participation, encourage questions, or manage difficult conversations about prognosis and care planning.

These barriers are not unique to Palestine but are amplified by the country's challenging healthcare context. Regional studies have reported that patients in Arab countries are often less satisfied with nurses' communication in areas involving information exchange and care planning [21]. In many cases, responsibility for these discussions is deferred to physicians, leaving nurses underprepared to handle the communicative aspects of decision-sharing [22]. Yet, research from other contexts suggests that structured interventions, such as family-centered communication training or question-prompting tools, can substantially increase participation [23, 24]. This

underscores the need for structured communication training regarding patient or parent(s) engagement in sharing decisions and questioning.

Interestingly, this study found no statistically significant association between nurses' demographic or personal characteristics and their scores on the competency to practice effective communication skills. Factors, such as age, gender, years of experience, or even prior communication training, did not appear to influence perceived competency. This suggests that practicing effective communication skills may not be an innate trait linked to personal attributes or seniority, but rather a set of skills that require deliberate development and reinforcement. While some studies have shown improvements in communication performance with experience or training, the benefits of such improvements may depend on the content, duration, and delivery of training programs [22]. The lack of observed impact from prior training in our sample may also reflect the limited availability or quality of such programs. Moreover, informal learning and role modeling may be insufficient for cultivating the complex skills required in pediatric oncology, underscoring the need for formal, ongoing training tailored to local cultural and institutional realities.

# 5. STUDY LIMITATIONS

This study has some limitations that should be considered. The small number of nurses who had received formal communication training limited the ability to detect potential differences and may have obscured significant associations. In addition, the overall sample size may not have been sufficient to capture the full variability in communication competencies across different demographics. While these limitations may affect the interpretation and generalizability of the findings, this study provides important preliminary insights into the communication competencies of pediatric oncology nurses and highlights critical areas for further investigation and targeted intervention.

# CONCLUSION

This study found that pediatric oncology nurses generally perceive their communication with patients and parents as moderately effective. The nurses rated themselves highly in skills related to treating patients with

respect, showing care and concern, and attending to patients' needs to facilitate effective and compassionate communication. This study identified one significant pitfall for nurses while practicing communication skills, where nurses were less likely to involve children and parents in decisions, encourage questions, or discuss next steps. Moreover, communication scores did not vary by nurses' gender, age, tenure, or even prior communication training. This aligns with expert warnings that relying solely on informal role modeling and unstructured learning perpetuates deficits in care provider communication. Therefore, this implies a clear need for focused education and system changes. We recommend developing structured training, such as workshops or curricula, that specifically addresses engaging children and parents in discussions and decision-making. In addition, hospitals should also ensure adequate staffing and sufficient time so that nurses can address questions and explain care plans. Further research is also needed, focusing on the evaluation of the effectiveness of structured communication skills training, with an emphasis on patient-family-centered techniques and shared decision-making.

#### **AUTHORS' CONTRIBUTIONS**

The authors confirm their contribution to the paper as follows: R.I.: Data analysis and interpretation; F.Z.: Writing the paper; A.H.M.: Writing, reviewing, and editing. All authors reviewed the results and approved the final version of the manuscript.

# LIST OF ABBREVIATIONS

CAT = Communication Assessment Tool

ON = Oncology Nurses

JCI = Joint Commission International

IRB = Institutional Review Board

CEP = Continuing Education Program

# ETHICS APPROVAL AND CONSENT TO PARTICIPATE

The study was approved by the Institutional Review Board (IRB) of An-Najah National University (Ref. No. Nurs. March. 2025/10, dated March 04, 2025).

# **HUMAN AND ANIMAL RIGHTS**

All procedures performed in studies involving human participants were in accordance with the ethical standards of institutional and/or research committee and with the 1975 Declaration of Helsinki, as revised in 2013.

# **CONSENT FOR PUBLICATION**

Informed consents were obtained from all participants.

## STANDARDS OF REPORTING

STROBE guidelines were followed.

## AVAILABILITY OF DATA AND MATERIALS

The data supporting the findings of the article will be available from the corresponding author [F.Z] upon reasonable request.

#### **FUNDING**

None.

## **CONFLICT OF INTEREST**

The authors declare no conflict of interest, financial or otherwise.

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