











The Impact of Communication Skills Training on Nurses' Competencies and Stress-Coping Strategies in Palliative Care: A Study in Shymkent and Astana, Kazakhstan

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ABSTRACT

Background

Effective communication is a critical skill for nurses, particularly in palliative care, where emotional and complex patient interactions are common. Training nurses in communication skills may improve both their competence in patient interactions and their ability to manage the emotional demands of end-of-life care.

Objective

This study aimed to assess the impact of a training program on communication competencies and stress-coping strategies among nurses in two distinct regions, Shymkent and Astana, with a focus on palliative care settings.

Methods

A descriptive-analytical, cross-sectional study was conducted from January to December 2024 in two palliative care hospitals in Shymkent and Astana, Kazakhstan. Thirty nurses (15 from each hospital) participated. They completed a self-assessment of their communication skills before and after attending a communication skills training seminar, with follow-up assessments after six months. Two instruments were used: the Communicative Competence Scale (CCS) to measure communication skills and the Ways of Coping Questionnaire (WCQ) to assess coping strategies related to stress.

Results

Before training, nurses in Shymkent demonstrated significantly higher communication competence scores ($M = 109.27$) compared to those in Astana ($M = 98.6$). After training, both groups showed improvements in communication skills, with Astana nurses experiencing the most significant increase in their self-assessment scores ($M = 106.13$). Notably, nurses in Astana showed a marked improvement in coping strategies, including increased seeking of social support and decreased reliance on confrontational and distancing behaviors.

Conclusion

Communication skills training significantly enhances nurses' communication competencies and coping strategies, particularly in regions where initial competencies were lower. These improvements may lead to better patient care and increased nurse well-being in palliative care settings. Further integration of communication training in nursing education is recommended.

Keywords

Communication, nurses, training, nurses' skills, palliative care

INTRODUCTION

Effective communication is a fundamental aspect of nursing practice, particularly in palliative care, where nurses play a central role in providing care for patients with life-limiting illnesses. Communication in palliative care settings is complex and multifaceted, requiring nurses to navigate difficult conversations, deliver sensitive

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information, and offer emotional support to both patients and their families¹. As such, strong communication skills are essential for fostering trust, ensuring patient comfort, and improving overall care outcomes in these emotionally challenging environments^{2,3}.

Research has demonstrated that good communication between healthcare providers and patients positively impacts patient outcomes, including physical, emotional, and psychological well-being. Similarly, educational interventions have been shown to significantly improve medication adherence among patients with chronic conditions, such as glaucoma, as highlighted in a recent study on glaucoma patients in Kazakhstan⁴. A comprehensive bibliometric review of glaucoma management over four decades further underscores the evolving role of primary care in improving patient outcomes through effective communication and education. “Nurses, who spend the most time with patients, are often the key facilitators of these interactions, and their ability to communicate effectively has a direct influence on both the care process and the patient’s experience⁵. A qualitative study on registered nurses in Kazakhstan highlights the importance of independent consultations in primary healthcare, where nurses play a pivotal role in patient education and support. In palliative care, this becomes especially important as patients and their families are often grappling with distressing diagnoses and decisions about end-of-life care. Poor communication can result in misunderstandings, unmet needs, and increased emotional distress⁶.

Despite the recognized importance of communication in nursing, studies have shown that many nurses feel inadequately prepared to handle the emotionally charged situations common in palliative care settings. This gap in skills is often attributed to insufficient training in communication during nursing education programs. While some research has focused on training in communication for specific tasks, such as delivering bad news, there is a need for broader, structured communication skills training that addresses the everyday interactions nurses have with patients and families in palliative care.

Furthermore, nurses working in palliative care frequently face high levels of stress, which can be exacerbated by the emotional demands of the job. Effective coping strategies are therefore essential to maintaining personal well-being and preventing burnout

⁷. Previous studies have identified that communication skills and coping strategies are intertwined; nurses who feel confident in their communication abilities are better equipped to manage stress and prevent emotional fatigue⁸. However, little research has focused on the relationship between communication skills training and stress-coping strategies specifically in palliative care contexts.

Communication is a critical element in the nursing profession, essential not only for delivering quality patient care but also for identifying and addressing patient needs. Nurses must possess strong communication skills, competence, and efficiency, as they face diverse challenges that vary depending on the clinical setting and the complexity of care required⁹. Effective communication is recognized as a key factor in enhancing nursing services and is essential for building therapeutic relationships with patients. A cross-sectional study on palliative care patients further emphasizes that factors such as empathy, responsiveness, and clear communication significantly influence patient satisfaction with nursing care. Research has shown that good communication between nurses and patients can positively impact patient health outcomes, improving not only physical health but also emotional, mental, and social well-being. Additionally, communication competence enables nurses to better recognize patient concerns, make informed decisions regarding patient transfers and discharges, and offer appropriate health interventions¹⁰. It also contributes to improved teamwork, reduces medical errors, shortens hospital stays, lowers healthcare costs, and alleviates stress and burnout among healthcare professionals, ultimately boosting job satisfaction, productivity, and overall job performance.

Conversely, communication disorders can contribute to extended hospital stays, increased instances of missed care, and higher rates of errors. Research indicates that many public complaints and instances of patients misunderstanding or incorrectly following medical instructions are not necessarily due to healthcare workers’ incompetence, including nurses, but rather stem from communication failures, which in turn lead to patient dissatisfaction. Therefore, the communication competence of nurses, who are directly involved in patient care, is crucial. Improving these skills is essential as a preventive measure, as inadequate communication can pose significant risks to patient safety¹¹. It is

necessary to recognize and address communication competence as a key factor in enhancing nursing effectiveness and overall job performance.

In nursing, the learning of communication skills primarily occurs through the educational process. Research indicates that communication abilities can be enhanced through targeted education. Additionally, studies highlight that empathic communication, which is essential for fostering nurse-patient relationships, can be taught and strengthened through effective teaching methods within nursing education programs¹². These findings underscore the importance of structured education in cultivating the communication skills necessary for quality patient care and professional development in nursing.

Communication in nursing is a complex and multifaceted process, rather than a simple, naturally occurring one. Like other essential nursing skills, it demands substantial education and continuous practice. The need for expert communication is fundamental across all areas of nursing practice, but it becomes particularly critical during challenging times, such as when managing serious illness or providing end-of-life care.

Much of the existing literature on communication in palliative care focuses on physician-patient interactions, particularly in the context of delivering bad news¹³. However, nurses, who are the constant presence in clinical settings, often play a pivotal role in helping patients and their families process difficult news. They spend significant time with patients, offering support, interpreting information, and providing emotional support in response to distressing diagnoses.

Nurses have numerous opportunities to positively influence patient care through effective communication throughout the different stages of serious illness. Patients and families often experience fears and concerns about the dying process, such as pain, symptom management, and feelings of abandonment. From the time of diagnosis, nurses are integral in providing information, clarifying medical details, and listening to patients and families as they consider treatment options. During active treatment phases, such as chemotherapy, nurses are essential in listening to and addressing patient concerns, guiding them to communicate these issues to the healthcare team. In advanced stages of illness, particularly as patients approach the end of life, effective communication becomes vital to facilitate decisions

about care and to ensure that the patient's and family's needs are understood and addressed.

The purpose of this study to assess the impact of a training program on communication competencies and stress-coping strategies among nurses in two distinct regions, Shymkent and Astana, with a focus on palliative care settings.

By evaluating these outcomes, this study seeks to provide evidence for the potential benefits of structured training in enhancing nurses' professional development and supporting their mental well-being, ultimately contributing to higher quality care for patients in palliative settings.

MATERIALS AND METHODS

From January to December 2024, a descriptive-analytical and cross-sectional study was conducted in the Shymkent and Astana Palliative Care Hospitals of Kazakhstan. A total of 30 nurses, 15 from Shymkent and 15 from Astana working in palliative care centers participated in the study. All participants completed a self-assessment of their communication skills before and after attending the training seminar, with a follow-up assessment conducted after 6 months.

Data collection tool and methods

Two instruments were used in this study.

- 1) Self-Assessment of Communication Skills of Nurses Using the Communicative Competence Scale (CCS)

The objective of this study was to assess the communication skills of nurses working in palliative care centers in Shymkent and Astana using the international Communicative Competence Scale (CCS). The study also aimed to evaluate changes in these skills after participation in a communication skills training seminar.

To assess communicative competence, the CCS was used, consisting of 36 statements that participants rated on a Likert scale (1–5 points):

1 point – strongly disagree, 2 points – disagree, 3 points – neutral, 4 points – agree, 5 points – strongly agree.

The scale assesses five key competencies:

- General communication skills,
- Empathy,
- Interaction management,

- Flexibility in relationships,
- Social relaxation.

For statements 4, 8, 11, 12, and 28, a special rule was applied: if the response was “strongly disagree”, the maximum score of 5 points was assigned.

Assessment of Communication Skills

Communication skills were assessed according to the following scale:

- Up to 71 points – very low communicative competence,
 - 72–107 points – low communicative competence,
 - 108–143 points – high communicative competence,
 - 144–180 points – very high communicative competence.
- 2) To assess the effectiveness of the nurses’ training, we also used the Ways of Coping Questionnaire (WCQ) to evaluate coping strategies (CS), as well as a psychological diagnostic method for assessing coping mechanisms in response to stress and challenging situations, developed by experts at the V.M. Bekhterev St. Petersburg Research Psychoneurological Institute.

This instrument is designed to assess coping strategies for stress and problematic situations. In practice, the version of the questionnaire obtained during the study of its construct validity is most commonly used. The Coping Strategies Questionnaire (CSQ) consists of 50 statements, each reflecting a specific type of behavior in a difficult or problematic situation¹⁴. The statements are rated by the respondent on a 4-point scale based on the frequency of using the proposed coping strategy (never – 0 points, rarely – 1 point, sometimes – 2 points, often – 3 points). The items of the questionnaire are grouped into eight scales, corresponding to the main types of coping strategies (ways of adapting to stress) identified by the authors:

1. Confrontation
2. Distancing
3. Self-control
4. Seeking social support
5. Accepting responsibility
6. Escape-avoidance
7. Problem-solving planning
8. Positive reappraisal

Ethical considerations

The instruments was examined by the Local Ethics Commission of the Kazakh National Medical University, Almaty, Kazakhstan. Conclusion of the Local Ethics Commission No. 21 (157) dated 01/11/2024.

RESULTS

As a result of the self-assessment analysis of nurses before training, it was found that the nurses in Shymkent had a higher level of communication competencies compared to their colleagues in Astana. In Shymkent, 66.7% (n = 10) of the surveyed nurses demonstrated a high level of communication competencies, whereas in Astana, only 6.7% (n = 1) of the nurses exhibited a high level of the competencies being assessed. In Shymkent, 33.3% (n = 5) of the nurses had a low level of communication competencies, while in Astana, 93.3% (n = 14) of the nurses were classified as having a low level of communication competencies.

The average total score for communication competencies among the nurses in Shymkent was 109.27 points (M = 109.27; SD = 4.03), while the average score for communication competencies among the nurses in Astana was 98.6 points (M = 98.6; SD = 6.01). Thus, the average communication competency score of nurses in Shymkent was statistically significantly higher by 10.67 points compared to nurses in Astana (t = 5.71, df = 28, p < 0.001).

Data on various competencies (general communication skills, empathy, interaction management, flexibility in relationships, social relaxation) for the nurses in Shymkent and Astana are presented in the table.

Table: Average Score of Nurses’ Communication Competencies

| Competency Name | Shymkent | Astana |
|------------------------------------|----------|--------|
| General Communication Competencies | 22.6 | 25.7 |
| Empathy | 25.7 | 19.1 |
| Interaction Management | 19.7 | 23.1 |
| Flexibility in Relationships | 20.9 | 17.7 |
| Social Relaxation | 20.2 | 12.9 |

According to the obtained data, prior to the training, the nurses in Shymkent had a low average score in competencies such as interaction management, social relaxation, and flexibility in relationships, while the nurses in Astana had low average scores in competencies such as social relaxation, flexibility in relationships, and empathy.

The analysis of self-assessment results of nurses' communication skills after training (6 months later) showed that the average score on the self-assessment scale for nurses in palliative care clinics in Shymkent was 109.47 ($M = 109.47$, $SD = 2.7$), while for nurses in Astana it was 106.13 ($M = 106.13$, $SD = 3.3$). According to the data, after the training, the average communication competency score of nurses in Shymkent was statistically significantly higher by 3.34 points compared to their colleagues in Astana ($t = 3.01$, $df = 28$, $p = 0.005$).

However, when comparing the overall average communication skills score of nurses in Shymkent before and after training, no statistically significant differences were found (M before training = 109.27, M after training = 109.47, $t = 0.417$, $df = 14$, $p = 0.683$).

The analysis of the self-assessment results of nurses' communication skills in Astana revealed that after the training, the average communication skills score significantly increased by 7.53 points ($t = 10.15$, $df = 14$, $p < 0.001$).

Furthermore, the self-assessment of communication skills showed that after the training, the proportion of nurses in Astana with high scores on communication skills increased from 6.7% to 33.3%, while in Shymkent it increased from 66.7% to 80.0%.

Thus, the self-assessment of general communication skills was higher among the nurses in Shymkent prior to training than among those in Astana, while the training had a more effective impact on the nurses in Astana.

Results of the Study Communicative Competence Scale (CCS)

The self-assessment results before and after the training showed the following key findings:

- Initial Results (before training):
 - o The majority of nurses in both cities scored in the low competence range (72–107 points), indicating a clear need for improvement in their communication skills for better interaction with patients and

colleagues.

- After the Training:
 - o Six months after the seminar, results showed significant improvement, with most participants scoring in the high competence range (108–143 points), indicating an increase in their communication skills.
- Areas for Improvement:
 - o Despite the overall improvement, some participants still rated their skills as low, particularly in the areas of interaction management and flexibility in relationships. This may be due to the specific challenges in palliative care, where complex and emotionally charged situations require not only technical skills but also a high level of empathy and adaptability in communication.

According to results instrument Ways of Coping Questionnaire (WCQ)

Assessment of the Preference for Stress-Coping Strategies among Nurses

Table: Norms of the CSQ for Scoring Based on Total Points

| Coping Strategies | Low Values | Medium Values | High Values |
|--------------------------|------------|---------------|-------------|
| Confrontational Coping | 0 to 7 | 8 to 11 | 12 to 16 |
| Distancing | 1 to 7 | 8 to 11 | 12 to 16 |
| Self-Control | 1 to 10 | 11 to 15 | 16 to 19 |
| Seeking Social Support | 0 to 7 | 8 to 13 | 14 to 17 |
| Accepting Responsibility | 0 to 5 | 6 to 9 | 10 to 12 |
| Avoidance | 1 to 7 | 8 to 14 | 15 to 22 |
| Problem-Solving Planning | 3 to 9 | 10 to 13 | 14 to 18 |
| Positive Reappraisal | 1 to 9 | 10 to 14 | 15 to 19 |

Indicators of Preferred Stress-Coping Strategies of Nurses in Astana Before and After Training

Table. Indicators of Preferred Stress-Coping Strategies of Nurses in Astana Before and After Training

| Respondent No. | Coping Strategies | | Distancing | Self-Control | Seeking Social Support |
|--------------------------|-------------------|------------|-------------|--------------|------------------------|
| | Before | After | | | |
| 1 | 11 | 6 | 6 | 6 | 7 |
| 2 | 11 | 8 | 9 | 8 | 11 |
| 3 | 10 | 9 | 9 | 7 | 13 |
| 4 | 11 | 9 | 12 | 10 | 14 |
| 5 | 15 | 8 | 15 | 6 | 10 |
| 6 | 14 | 12 | 12 | 12 | 14 |
| 7 | 15 | 9 | 12 | 12 | 14 |
| 8 | 13 | 8 | 11 | 6 | 8 |
| 9 | 16 | 7 | 12 | 10 | 13 |
| 10 | 15 | 8 | 12 | 9 | 11 |
| 11 | 15 | 8 | 13 | 10 | 13 |
| 12 | 13 | 12 | 13 | 13 | 14 |
| 13 | 12 | 6 | 13 | 9 | 9 |
| 14 | 14 | 12 | 15 | 11 | 10 |
| 15 | 13 | 7 | 11 | 6 | 7 |
| Average Score | 13.2 | 8.6 | 11.7 | 9.0 | 11.2 |
| Statistical Significance | p = 0.0007 | p = 0.0037 | p = 0.013 | p = 0.0007 | |
| Assessment | High | Medium | High | Medium | Medium |
| Maximum Score | 18 | 18 | 18 | 18 | 21 |

According to the data obtained, after training, a statistically significant decrease was observed in coping strategies such as confrontation (the group's total score dropped from 13.2 to 8.6), distancing (from 11.7 to 9.0), and self-control, while seeking social support showed a statistically significant increase (from 11.2 to 13.6 and from 9.7 to 13.7, respectively).

Table. Indicators of Preferred Stress-Coping Strategies of Nurses in Astana Before and After Training

| Respondent No. | Coping Strategies | | Escape-Avoidance | Problem-Solving Planning | Positive Reappraisal |
|--------------------------|-------------------|------------|------------------|--------------------------|----------------------|
| | Before | After | | | |
| 1 | 4 | 10 | 13 | 7 | 6 |
| 2 | 6 | 8 | 11 | 8 | 8 |
| 3 | 6 | 8 | 11 | 8 | 11 |
| 4 | 7 | 8 | 10 | 10 | 11 |
| 5 | 6 | 9 | 15 | 4 | 9 |
| 6 | 8 | 8 | 10 | 10 | 12 |
| 7 | 5 | 10 | 11 | 11 | 10 |
| 8 | 5 | 6 | 11 | 5 | 7 |
| 9 | 5 | 8 | 11 | 8 | 10 |
| 10 | 5 | 9 | 10 | 8 | 10 |
| 11 | 8 | 8 | 11 | 9 | 11 |
| 12 | 7 | 8 | 11 | 11 | 12 |
| 13 | 5 | 5 | 9 | 7 | 6 |
| 14 | 7 | 8 | 12 | 8 | 11 |
| 15 | 7 | 8 | 11 | 5 | 7 |
| Average Score | 6.1 | 8.1 | 11.1 | 7.9 | 9.4 |
| Statistical Significance | p = 0.0023 | p = 0.0037 | p = 0.0024 | p = 0.0037 | |
| Assessment | Medium | Medium | Medium | Medium | Low |
| Maximum Score | 12 | 12 | 15 | 15 | 18 |

Statistical analysis indicated the effectiveness of the training of nurses in Astana. Preferred coping strategies, such as accepting responsibility, problem-solving planning, and positive reappraisal, showed significant increases in the group, while "escape-avoidance" decreased (from 11.1 to 7.9 points).

Thus, the effectiveness of the training of nurses in Astana through the program “Development of Integrated Competencies in Self-Control and Communication Skills” is confirmed by the increased levels of coping strategies like “Seeking Social Support” and “Positive Reappraisal” from medium to high, as well as the decrease of strategies like “Confrontation” and “Distancing” from high to medium.

Indicators of Preferred Stress-Coping Strategies of Nurses in Shymkent Before and After Training

Table. Indicators of Preferred Stress-Coping Strategies of Nurses in Shymkent Before and After Training

| Respondent No. | Coping Strategies | | Self-Control | | Seeking Social Support |
|----------------|-------------------|-------|--------------|-------|------------------------|
| | Before | After | Before | After | Before |
| 1 | 6 | 6 | 10 | 6 | 4 |

It should be noted that the training of nurses in Shymkent was not effective. No statistically significant differences were found between the levels of coping strategies such as confrontation, distancing, self-control, and seeking social support before and after the training. The average level of the listed competencies remained the same both before and after the training.

Table. Indicators of Preferred Stress-Coping Strategies of Nurses in Astana Before and After Training

| Respondent No. | Coping Strategies | | Problem-Solving Planning | | Positive Reappraisal |
|----------------|-------------------|-------|--------------------------|-------|----------------------|
| | Before | After | Before | After | Before |
| 1 | 8 | 4 | 5 | 7 | 5 |
| 2 | 9 | 6 | 5 | 9 | 5 |
| 3 | 8 | 8 | 6 | 7 | 5 |
| 4 | 8 | 8 | 5 | 10 | 5 |
| 5 | 7 | 7 | 3 | 9 | 7 |
| 6 | 8 | 9 | 5 | 12 | 9 |
| 7 | 8 | 8 | 7 | 11 | 9 |
| 8 | 8 | 4 | 6 | 6 | 9 |
| 9 | 6 | 8 | 5 | 7 | 8 |
| 10 | 7 | 7 | 7 | 7 | 7 |

| Respondent No. | Coping Strategies | Accepting Responsibility | Escape-Avoidance | Problem-Solving Planning | Positive Reappraisal |
|---------------------------------|-------------------|--------------------------|------------------|--------------------------|----------------------|
| 11 | 5 | 6 | 8 | 10 | 8 |
| 12 | 3 | 7 | 8 | 11 | 8 |
| 13 | 3 | 5 | 8 | 7 | 9 |
| 14 | 4 | 8 | 9 | 8 | 10 |
| 15 | 5 | 6 | 7 | 5 | 9 |
| Average Score | 6.5 | 6.7 | 6.3 | 8.4 | 7.5 |
| Statistical Significance | p = 0.6805 | p = 0.0127 | p = 0.0015 | p = 0.0007 | |
| Assessment | Medium | Medium | Low | Medium | Low |
| Maximum Score | 12 | 12 | 15 | 15 | 18 |

At the same time, the training of nurses in Shymkent showed effectiveness in coping strategies such as “Problem-Solving Planning” and “Positive Reappraisal.” Statistically significant increases were found in the group’s average score for these competencies, from 7.5 to 11.1 and from 6.5 to 11.9, respectively. However, the coping strategy “Escape-Avoidance” significantly increased after the training, from 6.3 to 8.4 points.

Thus, the training of nurses in Shymkent, six months after the training, did not show overall effectiveness.

DISCUSSION

This study aimed to assess the impact of a training program on communication competencies and stress-coping strategies among nurses in two distinct regions, Shymkent and Astana, with a focus on palliative care settings. The results reveal significant regional differences in baseline competencies, as well as varied responses to the training intervention. These findings are discussed in light of existing literature on communication training and stress management in healthcare settings.

Communication Competencies

Before the training, nurses in Shymkent demonstrated higher levels of communication competencies compared to their counterparts in Astana. Specifically, 66.7% of nurses in Shymkent reported high communication competencies, in contrast to only 6.7% in Astana. The overall average communication score for nurses

in Shymkent was significantly higher than that for nurses in Astana, suggesting a regional difference in communication skills. This finding aligns with previous studies, such as those by Finke et al.¹⁵, who observed that communication competencies can be influenced by regional healthcare infrastructure and access to professional development opportunities. Nurses in Shymkent may have had greater access to communication training or were working in environments that emphasized communication skills more than those in Astana.

The improvements observed post-training were greater among nurses in Astana, where the baseline communication competencies were lower. This finding is consistent with Tilley's research, which suggested that individuals with lower initial competency levels often show more significant improvements after interventions. In contrast, nurses in Shymkent, who started with higher communication competency scores, showed only modest improvements post-training. This could be due to the ceiling effect, as suggested by Dixon et al.¹⁶, where participants who are already highly skilled have less room for improvement. Therefore, future training programs targeting already high-performing groups may need to incorporate more advanced content to challenge participants further.

Additionally, the increase in the proportion of nurses in both regions achieving high communication competency scores post-training, though more pronounced in Shymkent, reflects the general effectiveness of the training program. This finding supports Leach, who argued that even small improvements in communication competencies can contribute to long-term professional development. This suggests that communication-focused training programs, even those yielding modest results in highly skilled groups, can still foster long-term improvements in nursing practice.

Stress-Coping Strategies

The study also revealed significant changes in the stress-coping strategies of nurses, particularly in Astana. After the training, nurses in Astana reported a decrease in the use of maladaptive coping strategies, such as confrontation, distancing, and self-control. Conversely, strategies like seeking social support and positive reappraisal saw significant increases. These shifts align with research by Weber and Piller, who found that training programs focusing on emotional intelligence and adaptive coping strategies can help

healthcare workers better manage stress. The increased use of social support in particular is crucial in palliative care, where emotional support from colleagues can help mitigate the psychological burden of caring for terminally ill patients¹⁷.

The findings also suggest that the training program effectively encouraged more adaptive strategies, such as positive reappraisal and problem-solving planning, which are consistent with the work of Harrison¹⁸. These strategies enable healthcare professionals to reinterpret stressful situations in a way that reduces emotional distress and enhances resilience. Moreover, the increase in seeking social support post-training underscores the importance of collaborative work environments in healthcare, as emphasized by Kerr, who found that healthcare workers in emotionally demanding settings benefit from building strong support networks¹⁹.

However, the nurses in Shymkent showed less improvement in their coping strategies overall, with a significant increase in escape-avoidance strategies. This unexpected result may reflect the emotional strain some nurses experienced during the training process. Salmela-Aro argued that healthcare professionals working in high-stress environments, such as palliative care, may resort to avoidance coping mechanisms when faced with emotionally challenging content. This highlights the need for training programs to not only promote adaptive coping strategies but also help nurses effectively manage the emotional demands of their work. Miller²⁰ pointed out that unaddressed emotional distress can lead to burnout, which is particularly concerning in palliative care settings.

The lack of significant changes in Shymkent could also be explained by the fact that the nurses in this region were already adept at managing stress before the training. Brunetto²¹ found that healthcare workers with strong pre-existing coping skills may require more advanced interventions to further enhance their coping mechanisms. This could explain why Shymkent nurses did not show as much improvement as those in Astana, who started with lower baseline coping skills and had more room for growth.

Implications for Future Training Programs

The results of this study suggest several key considerations for future nurse training programs. First, the clear differences in the impact of the training between Shymkent and Astana highlight the

importance of tailoring training interventions to the specific needs of the target group. Bennett and Zierler²² emphasized that training programs should be adapted based on the baseline competencies of participants to ensure that interventions are effective. For nurses who already demonstrate high communication competencies or effective stress management, more advanced or specialized training content may be necessary to promote continued professional growth.

Additionally, the study suggests that stress-coping training programs in palliative care should focus not only on promoting adaptive coping strategies but also on building emotional resilience²³. Cameron argue that programs that combine cognitive-behavioral strategies with emotional regulation techniques can help healthcare workers better manage the emotional challenges of their roles. In this context, the increase in escape-avoidance strategies in Shymkent points to the need for training programs that specifically address how to deal with the emotional demands of palliative care in a healthy and adaptive manner²⁴.

The findings also suggest that future training programs should encourage social support and peer collaboration. Ammar²⁵ noted that social support networks are vital for healthcare workers in emotionally taxing environments. This is especially relevant in palliative care, where emotional support from colleagues can be a significant buffer against burnout. Training programs should therefore incorporate opportunities for nurses to engage with their peers, share experiences, and develop strategies for supporting each other emotionally²⁶.

CONCLUSION

This study demonstrates that training programs aimed at improving communication competencies and stress-coping strategies can have a positive impact on nurses working in palliative care, although the effect can vary depending on regional differences and baseline skill levels. While the training was more effective in Astana, where nurses had lower initial competencies, the results suggest that even small improvements in communication and coping strategies can contribute to long-term professional growth. Moving forward, future training programs should be more tailored to the specific needs of nurses in different regions and should place a greater

emphasis on building emotional resilience and fostering collaborative work environments. By addressing these factors, we can help nurses in palliative care settings better manage the emotional demands of their work, ultimately improving patient care and reducing burnout.

While a general improvement was observed, differences between nurses from Shymkent and Astana may be attributed to regional and cultural factors, which should be considered in future analyses.

Practical Implications of the Study

The results of this study highlight the importance of continuous improvement in communication skills for nurses, especially in palliative care settings, where effective communication is crucial for enhancing care quality and patient satisfaction.

Limitations

The limitations of this study include its cross-sectional design, the reliance on self-reported data, which may have influenced the accuracy of the nurses' responses, the use of a questionnaire, and the limited generalizability of the findings to other societies and cultural contexts. Therefore, it is recommended that future research employ interventional, qualitative, and longitudinal study designs with larger sample sizes, conducted in diverse cultural settings and across other palliative care hospitals Kazakhstan s cities.

Data Availability Statement

The original results presented in the study are included in the article/additional material, additional requests can be sent to the corresponding author

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Conflict of Interest

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