

# What is the Evidence of Practice and Education Related to Serious Illness Communication in Arab Countries? A Literature Review

Aseel Ghazi Alghanemi, MD\*, \*\*

## ABSTRACT

Communication between physicians and patients is an essential component of clinical practice. The available literature on practice and education related to serious illness communication (SIC) in Arab countries is summarized in this review article. A comprehensive search of various medical databases was conducted for pertinent literature concerning SIC practices and education in Arab countries. These databases consist of Scopus, Google Scholar, and PubMed. The final assessment consisted of a total of 88 articles. By enhancing patient experience and outcomes, serious illness communication leads to high-quality care. In Arab countries, the experiences and preferences of patients and their families are significantly influenced by cultural, religious, and social factors. Regardless of the obstacles that arise from cultural and healthcare practice disparities, there is an improvement in comprehension of the fundamental nature of effective SIC in enhancing patient outcomes and increasing the quality of care. Due to various factors, there is a scarcity of research on SIC in Arab countries. One potential explanation is that palliative care services are typically either underdeveloped or poorly integrated into the healthcare system, which results in a lack of attention to this field in terms of research and practice. Thus, studies are impeded by cultural sensitivities and superstitions, which prohibit open communication about the process of dying. Additionally, the scarcity of resources and specialized training additionally contributes to the absence of palliative care initiatives. Consequently, these obstacles have established a highly restrictive environment in which there are insufficient studies, publications, and awareness regarding the effective communication of severe illness in Arab countries. Innovative strategies, education, and research are essential to bridge the divide between healthcare practices and culture in the context of SIC. By promoting interdisciplinary collaboration, technology integration, continuous quality improvement, cultural competency, and communication skills training, healthcare institutions and caretakers can improve the quality of life for seriously ill patients and their families and enhance SIC practices.

**Keywords:** Serious illness communication, Palliative care communication, End-of-life communication, Arab countries, Middle East

## BACKGROUND

Communication between physicians and patients serves a vital function in clinical practice. Effective communication is a crucial element in the delivery of healthcare services<sup>1-3</sup>. High-quality communication with patients is an essential part of person-centred care, especially in cases of serious illness<sup>4</sup>. Serious illness is defined as “a health condition that carries a high risk of mortality and either negatively impacts a person's daily function or quality of life, or excessively strains their caregivers. Additionally, it may place an extreme burden on caretakers”<sup>5</sup>. According to estimates, more than 26 million people died in 2016 as a result of serious illnesses, including advanced cancer, dementia, and other similar diseases that cause tremendous health suffering<sup>6</sup>. This number is expected to increase to approximately 48 million by 2060<sup>6</sup>. Furthermore, patients with serious illnesses experience many complicated and multifaceted challenges that influence their overall health. In addition to physical symptoms and complex medical treatment approaches, patients often experience anxiety and uncertainty about the life-changing implications of their disease<sup>7-10</sup>.

Several terms are used to describe the time frame from the point at which a disease stops responding to the therapy to death: end-of-life, palliative care, actively dying, end of life, terminal care, terminal illness, and transition of care<sup>11-13</sup>. End-of-life care refers to the specialized care provided to individuals approaching the end of their life. The primary objective of this type of care is to deliver comprehensive services for legal issues while also ensuring the highest possible quality of life for

the patient<sup>14</sup>. Previous research highlighted that discussion about end-of-life care might be difficult because healthcare providers might not be adequately trained<sup>15</sup>.

Much evidence from prior observational research indicates that inadequate communication in serious illness care can be attributed to diverse factors, including system, physician, and patient-related factors<sup>16,17</sup>. Moreover, end-of-life communication is affected by the existence of guidelines and resources, leading to substantial differences between developing and developed countries<sup>18</sup>. In the Eastern Mediterranean region (EMR), the development of palliative care is affected by diverse socio-health factors<sup>19</sup>.

Physician-seriously ill patient communications aim to identify patients' values, goals, and prognoses, then provide them care and information according to their necessities<sup>4,20</sup>. Effective communication about serious illness is critical to improving outcomes for seriously ill patients. Much previous research has found that effective communication about serious illnesses improves patients' quality of life<sup>20-22</sup>. Moreover, it promotes informed decision-making<sup>23</sup>. Additionally, research evaluating the guide and program reveals that timely discussions of health problems can improve the care provision expertise of healthcare, reduce resource use, promote goal-concordant conversation, and decrease patient stress and anxiety<sup>24-27</sup>. Effective communication with seriously ill patients is critical, and it is essential to recognize and comprehend practice and education evidence related to communication with seriously ill patients

\* Department of Family Medicine, Faculty of Medicine  
King Abdulaziz University, Jeddah, Saudi Arabia.  
E-mail: Agalghanmy@kau.edu.sa

\*\* Department of palliative care, McGill University, Montréal, QC, Canada

in Arab countries. Nevertheless, there is still a gap in this area. There is no previous review article that examined practice and education related to serious illness communication in Arab countries. Therefore, this literature review aims to investigate existing practices and evidence associated with communication with seriously ill patients in Arab countries. The review emphasizes the challenges and possibilities to enhance communication and care for seriously ill patients in these countries.

## **METHODS**

### **Search Strategy:**

An extensive search was conducted in different medical databases for relevant literature regarding SIC practices and education in Arab countries. These databases include PubMed, Scopus, and Google Scholar. The reason for using these databases is their comprehensive coverage of medical and healthcare interdisciplinary research. This was not restricted to specific language articles in order to include all the important international and regional studies. There was no limit in the search for published articles in term of their time of publication.

### **Keywords and Search Terms:**

MeSh terms and keywords were used in this research. The following keywords and search terms were used to conduct the search strategy: (serious illness communication, palliative care communication, end-of-life communication, Arab countries, and Middle East).

### **Inclusion and Exclusion Criteria:**

#### **Inclusion Criteria:**

Studies that specifically examined SIC practices and education in Arab countries. Studies that addressed cultural considerations, training programs, and communication strategies in SIC.

#### **Exclusion Criteria:**

Studies that are not focused on palliative care communication or SIC. Studies that are not pertinent to the Arab context.

### **Study Selection:**

A total of 138 articles were identified during the initial search. The inclusion criteria were not met by 50 articles, which were excluded as a result of the screening of titles and abstracts for relevance. The final review comprised a total of 88 articles. These articles offered a global perspective and exhaustive insights into SIC practices, education programs, cultural influences, and challenges within Arab countries. The following themes were addressed in this literature review: the impact of SIC, cultural aspects in Arab countries, palliative care in Arab countries, barriers to palliative care, cancer care in Arab countries, practice and education related to SIC in Arab countries, innovations and best practices in SIC (training programs, integrating technology, enhancing clinical culture aspects, and continuous quality improvement).

### **Cultural Aspects in Arab Countries**

Decision-making in Western cultures is based on the patient's requirements and necessitates collaboration between the physician and the patient<sup>28</sup>. In contrast, in Middle Eastern societies, family members collectively make decisions for each other and are provided with comprehensive patient's illness medical details<sup>29,30</sup>. Although cultural heritage is significant, medical practices must take priority over cultural values<sup>28</sup>.

Muslims believe that Allah has predetermined the timing of individual death. Moreover, life and death are handled by Allah's will<sup>31</sup>. According to this concept of predestination, the duration of a person's life is unchangeable. Death is believed to be a transition from the physical world to the Hereafter, which is the ultimate destination of all human beings<sup>31</sup>.

In Arab countries, palliative care clinicians require an essential understanding of Islam<sup>32</sup>. To bypass misconceptions and deliver more appropriate care, healthcare providers must enclose cultural competency<sup>33</sup>. Discretions for end-of-life care are affected by practices and religious beliefs<sup>34</sup>. The quality of life for the dying patient and their families can be enhanced by appropriate cultural estimation<sup>35-37</sup>. Healthcare professionals should be knowledgeable of the influence of Islam on Muslims' coping mechanisms and treatment options<sup>38</sup>. To address this, the World Federation of Critical Care Nurses acknowledges that culturally multifarious critically ill patients and their families have the right to obtain culturally sensitive care, and they released a Declaration on culturally sensitive critical care nursing<sup>39</sup>.

### **Palliative Care in Arab Countries**

Comprehensive care provided to life-threatening or serious illnesses patients is called palliative care. It involves the management of symptoms like pain and other physical discomforts of the patients and addressing the emotional, social, and spiritual needs of the patients and their families<sup>40,41</sup>. Palliative care specialists comprehend the importance of supporting other healthcare experts to ensure they have the knowledge and skills to provide high-quality care to patients with life-threatening and life-limiting conditions, from diagnosis to end-of-life care<sup>42,43</sup>.

Several developed countries such as the United States of America (USA), the United Kingdom (UK), Japan, and Australia have constructed significant advances in palliative care activity development at the end of life, including it as a mainstream service requirement in their healthcare systems<sup>18</sup>. In contrast, developing countries lack significant advances in palliative care activities at the end of life and are poorly supported in this care<sup>18</sup>.

Palliative care is a relatively recent field in the Arab world. Palliative care initially emerged at the beginning of the 1990s in Saudi Arabia and Jordan<sup>44</sup>. Although many countries have adopted it over the past 30 years, several others have yet to integrate it into their healthcare systems<sup>40,44,45</sup>. Numerous studies have demonstrated the challenges of developing palliative care in the Arab region<sup>46-49</sup>. In the WHO's EMRO, which includes most Arab countries, it is estimated that fewer than 1% of individuals who require palliative care have access to it<sup>45</sup>.

There is a lack of hospice care programs and palliative care programs in countries with Muslim-majority populations, particularly in low- and middle-income countries<sup>50-52</sup>. A prior study indicates that the lack of palliative care hinders access to other healthcare services and restricts the improvement of overall well-being in the countries<sup>53</sup>. Despite these challenges, some advancements have been made in developing palliative care programs in countries like Jordan, Saudi Arabia, and Kuwait (located in the Arabian Peninsula)<sup>54</sup>. It is significant to have health strategies and policies to help countries with limited resources because there are considerable differences in palliative care development in the Arab region<sup>54</sup>.

**4. Barriers to Palliative Care** There are several barriers to providing palliative care in the Middle East. These include the negative attitudes

of healthcare professionals, the fear of opioids, the shortage of resources, the unrealistic hopes of patients and their families, the lack of space and resources within the healthcare system, the absence of interdisciplinary teams and education, insufficient funding, and the lack of national policies<sup>55,56</sup>.

### **Cancer Care in Arab countries**

In Arab countries, the heightened burden of cancer is a considerable health problem. The Arab community and healthcare system are facing critical influences due to the increasing cancer incidence rates, which are due to population and developing age<sup>57</sup>. The estimated number of new cancer cases in Arab countries has increased by about 8% from 2018 to 2020, representing 2.4% of cancer incidence worldwide<sup>58</sup>.

In the EMR, cancer is the fourth foremost mortality reason, and lung, liver, colorectal, bladder, and breast cancers are the most common<sup>59</sup>. However, there is significant variability in cancer incidence rates among Arab countries, which emphasizes the importance of enforcing tailored cancer control measures. To effectively diminish the cancer burden, it is required to develop tailored approaches that consider the disparities in cancer risk factors and prevalence among Arab countries. Furthermore, diagnosed cancer patients within the region have increased palliative care necessities due to their tendency to present in the later phases of the disease<sup>46,55</sup>.

The fundamental way to help cancer patients is through palliative care, which involves efficiently dealing with painful factors during treatment. These include assisting patients with informed choices regarding their treatment objectives, quickly recognizing and managing pain and other symptoms, and providing social and psychological support to help patients and their families cope with the effects of cancer and cancer treatment<sup>60</sup>. Due to a shortage of providers in the Arab area, palliative care does not reach as many patients as it should. In addition, the concentration of palliative care services in urban areas makes it difficult for people residing in rural areas to access these services. This disparity in access to palliative care represents a significant challenge<sup>55</sup>.

Many studies show that customized communication interventions designed to meet cancer patients and their families' needs can provide several advantages. These interventions make it more comfortable for patients and those who take care of them to follow recommendations and finish their treatments<sup>61,62</sup>. Prior research found that patients with cancer required communication guidance and personalized recommendations from healthcare experts about their feelings and treatment<sup>63-65</sup>. These indicate the importance of having care that focuses on each patient and demonstrate the valuable effects of adopting a patient-centred approach to cancer care.

### **Practice and education related to serious illness communication in Arab countries**

There is increased interest in implementing effective SIC in Arab countries, but some challenges must be overcome, including cultural, religious, and social factors. To meet the various needs of patients and their families, enhance communication practices, and promote patient-centred care in Arab countries, approaches designed to meet these needs, such as education, training, and research, were implemented in many countries but are still required.

#### **Saudi Arabia**

As a result of language, religious, and cultural differences between nurses and patients in Saudi Arabia, the existing communication

between nurses and patients fails to fulfil the necessities of Saudi patients. These communication obstacles negatively impact patient fulfilment and safety<sup>66,67</sup>. Despite these obstacles, a prior study in Saudi Arabia found that intensive care units (ICU) nurses are qualified to provide palliative and end-of-life care and that in-service training has enhanced communication skills with patients and their families. A previous study concluded that such training significantly improved clinical practice and nurses' competence in providing palliative and end-of-life care<sup>68</sup>.

#### **Jordan**

There is a determined necessity to enhance physicians' attitudes and knowledge toward nurses' involvement in prognosis communication in Jordan<sup>69</sup>. Shared decision-making is not among the content taught within the communication skills training course in Jordanian schools, despite the incorporated course into the medical school's curricula. Therefore, Jordanian doctors may be trained poorly in this field<sup>70</sup>. Goals-of-care discussions could benefit Jordanians and Arabs with comparable cultures. Culturally sensitive implementation needs individual considerations, preparation of patients and their families, and public awareness<sup>71</sup>. However, a prior study conducted in Jordan has produced strong evidence about the efficacy of educational programs in enhancing the nurses' knowledge and attitude toward providing paediatric palliative care services. Therefore, a previous study suggests enforcing effective educational programs for nurses to provide more satisfactory palliative care services to paediatric patients<sup>72</sup>.

#### **United Arab Emirates**

In the United Arab Emirates, the internal medicine residency programs lack organised curricula about palliative medicine. Addressing curricula is essential to obtain high-quality care and train qualified health experts. Furthermore, internal medicine residency requires training to improve their SIC skills<sup>73</sup>.

#### **Lebanon**

In Lebanon, there is interest in improving SIC skills among healthcare providers through educational workshops. A previous study emphasized the necessity for follow-up assessments to determine short-term and long-term training consequences and advised expanding the offering of comparable knowledge of palliative care workshops to a broader population of nurses in Lebanon and the surrounding region to enhance overall skills and knowledge competency in palliative care<sup>74</sup>.

#### **Kuwait**

Previous research conducted in Kuwait among primary care doctors revealed that most doctors had an inadequate understanding of palliative care. Consequently, their palliative care attitudes were unfavourable. This study emphasizes the necessity of enhancing the communication abilities of doctors through training<sup>75</sup>.

#### **Oman**

In Oman and other nations in East Africa and the Middle East, there notable difficulties were identified in the continuous palliative care sustainability and performance. One of the primary challenges recognized is insufficient communication between healthcare providers, patients and their families. Providing healthcare professionals with culturally sensitive and proper training is essential to solve this problem<sup>76</sup>.

#### **Syria**

According to previous research in Syria, Syrian healthcare professionals do not have sufficient palliative care knowledge. Therefore, to deliver

adequate care to patients and improve the quality of life of patients nearing their death, it is necessary to incorporate palliative care into the healthcare system in Syria <sup>77</sup>.

## Tunisia

Tunisia is the only nation with a dedicated, independent strategy for palliative care. In contrast, multiple other Arab countries have integrated strategies for palliative care within their national "non-communicable disease" or "national cancer control" action plans <sup>78</sup>.

## Innovations and Best Practices in Serious Illness Communication

Advances in healthcare communications and technology have led to innovative approaches and best practices in SIC to enhance patient-centred care, improve communication effectiveness, and address the unique needs and preferences of patients and their families facing serious illnesses, these approaches and practices include:

### Training Programs

The Critical Care Communications (C3) course is an instance of these training programs. It incorporates brief teaching strategies with intentional practice through role-playing to improve the trainee's communication skills <sup>79,80</sup>. This practical course may encourage healthcare providers to practice and improve healthcare providers' communication strategies in a controlled environment, enhancing confidence and competence in SIC engagement. Furthermore, a previous study demonstrated the broad scope and effectiveness of Emergency Medicine (EM) Talk training in improving serious illness talk (SI Talk) <sup>81,82</sup>. This training program provides healthcare providers with the skills and knowledge necessary to engage in effective SIC, which leads to enhanced quality of care and patient outcomes.

### Integrating of Technology

Integrating technology into SIC has extended further prospects to improve the efficiency, effectiveness, and quality of care. Telehealth platforms and artificial intelligence (AI) are transforming the SIC landscape. AI-enabled telehealth may raise innovative treatment strategies and improve the quality of established medical practice <sup>83</sup>, which could lead to better health outcomes for patients. In busy practice environments, medical professionals could improve the effectiveness and efficiency of care delivery using a hybrid workflow that combines AI technology with human care (Hybrid AI-human) <sup>84</sup>.

### Enhancing Clinical Culture Aspects

Enhancing clinical culture can help change clinician practice in SIC. For instance, promoting changes in standards of practice through shared responsibility for initiating discussions about goals and values, highlighting the benefits to both patient care and physician satisfaction, enabling inter-professional collaboration, and changing paradigms for clinical can enhance person-centred SIC practices <sup>85</sup>.

### Continuous Quality Improvement

Implementing continuous quality improvement initiatives can help healthcare organizations create effective practices and improve health and clinical care outcomes <sup>86,87</sup>. Moreover, Continuous quality improvement (CQI) is a crucial element emphasized in the "National Consensus Project Clinical Practice Guidelines for Quality Palliative Care Guidelines, 4th Edition"<sup>88</sup>. The guidelines underline the significance of continuous assessment, monitoring, and improvement of care approaches and outcomes to ensure the delivery of high-quality palliative care to seriously ill patients and their families<sup>88</sup>.

Finally, in addition to the above practices, a previous communication study highlights the most effective practices for discussing care goals. These include determining wishes regarding family involvement, discussing perspectives on functional limitations and trade-offs, exploring objectives and worries, understanding decision-making preferences, and sharing information about the prognosis <sup>20</sup>.

## CONCLUSION

**Serious illness communication drives high quality care by improving patient experience and outcomes. In Arab countries, cultural, religious, and social factors significantly affect the experiences and preferences of patients and their families. There is an improvement in understanding of the essence of effective SIC in enhancing patient outcomes and improving the quality of care regardless of the challenges that result from cultural and healthcare practice disparities.**

There are limited studies related SIC in Arab countries due to different reasons which might be due to the fact that palliative care services usually are either undeveloped or badly integrated into the healthcare system, bringing less focus to this area in terms of practice and research. Cultural sensitivities and superstitions prevent open communication about the process of dying, thus hindering studies. Moreover, the lack of palliative care initiatives is further increased by the lack of resources and specialized training. As a result, such barriers set a very restrictive environment in which few studies, publications, and awareness exist about communicating effectively on issues of serious illness in Arab countries.

Innovative strategies, education, and research are necessary to fill the gap between culture and healthcare practices related to SIC. By encouraging cultural competency, communication skills training, interdisciplinary collaboration, technology integration, and continuous quality improvement, healthcare institutions and caretakers can enhance SIC practices and improve the quality of life for seriously ill patients and their families. In addition, as the area of SIC continues to develop, it is required to create, perform, and evaluate patient-centred approaches to ensure honest access to high-quality care for all individuals, regardless of their cultural, religious, or social environments.

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## REFERENCES

1. Arora NK. Interacting with cancer patients: the significance of physicians' communication behavior. *Soc Sci Med* 2003;57(5):791-806.
2. Stewart MA. Effective physician-patient communication and health outcomes: a review. *CMAJ* 1995;152(9):1423-33.
3. Roter DL. Physician/patient communication: transmission of information and patient effects. *Md State Med J* 1983;32(4):260-5.

4. Committee on Approaching Death Addressing Key End of Life Issues Institute of Medicine. Dying in America: Improving Quality and Honoring Individual Preferences Near the End of Life. *Nat Aca Pr* 2015; 1(1): 1-18.
5. Kelley AS, Bollens-Lund E. Identifying the Population with Serious Illness: The "Denominator" Challenge. *J Palliat Med* 2018;21(2):7-16.
6. Sleeman KE, de Brito M, Etkind S, et al. The escalating global burden of serious health-related suffering: projections to 2060 by world regions, age groups, and health conditions. *Lancet Glob Health* 2019;7(7):883-92.
7. Cassell EJ. The nature of suffering and the goals of medicine. *Loss, Grief & Care* 1998;8(1):129-42.
8. Tarbi EC, Meghani SH. A concept analysis of the existential experience of adults with advanced cancer. *Nurs Outlook* 2019;67(5):540-57.
9. An E, Lo C, Hales S, et al. Demoralization and death anxiety in advanced cancer. *Psychoonco* 2018;27(11):2566-72.
10. Harrison JD, Young JM, Price MA, et al. What are the unmet supportive care needs of people with cancer? A systematic review. *Supp Car C* 2009;17(8):1117-28.
11. Hui D, Nooruddin Z, Didwaniya N, et al. Concepts and definitions for "actively dying," "end of life," "terminally ill," "terminal care," and "transition of care": a systematic review. *J Pain Symptom Manage* 2014;47(1):77-89.
12. Izumi S, Nagae H, Sakurai C, et al. Defining end-of-life care from perspectives of nursing ethics. *Nurs Ethics* 2012;19(5):608-18.
13. Hui D, Mori M, Parsons HA, et al. The lack of standard definitions in the supportive and palliative oncology literature. *J Pain Symptom Manage* 2012;43(3):582-92.
14. Krau SD. The Difference Between Palliative Care and End of Life Care: More than Semantics. *Nurs Clin North Am* 2016;51(3):9-10.
15. Chi HL, Cataldo J, Ho EY, et al. Please Ask Gently: Using Culturally Targeted Communication Strategies to Initiate End-of-Life Care Discussions With Older Chinese Americans. *Am J Hosp Palliat Care* 2018;35(10):1265-72.
16. Janssen DJA, Spruit MA, Schols J, et al. Predicting changes in preferences for life-sustaining treatment among patients with advanced chronic organ failure. *Chest* 2012;141(5):1251-9.
17. Davison SN. End-of-life care preferences and needs: perceptions of patients with chronic kidney disease. *Clin J Am Soc Nephrol* 2010;5(2):195-204.
18. Alliance WPC. Global atlas of palliative care at the end of life. *Pal Care Alli* 2014; 1(1):111-7.
19. Knaul FM, Farmer PE, Krakauer EL, et al. Alleviating the access abyss in palliative care and pain relief-an imperative of universal health coverage: the Lancet Commission report. *Lancet* 2018;391(10128):1391-454.
20. Bernacki RE, Block SD. Communication about serious illness care goals: a review and synthesis of best practices. *JAMA Intern Med* 2014;174(12):1994-2003.
21. Haun MW, Estel S, Rücker G, et al. Early palliative care for adults with advanced cancer. *Cochrane Database Syst Rev* 2017;6(6): 1-29.
22. Epstein RM, Street Jr RL. Patient-centered communication in cancer care: promoting healing and reducing suffering. *National Ca Inst* 2007; 1(1): 1-222.
23. Austin CA, Mohottige D, Sudore RL, et al. Tools to Promote Shared Decision Making in Serious Illness: A Systematic Review. *JAMA Intern Med* 2015;175(7):1213-21.
24. Bernacki R, Paladino J, Neville BA, et al. Effect of the Serious Illness Care Program in Outpatient Oncology: A Cluster Randomized Clinical Trial. *JAMA Intern Med* 2019;179(6):751-9.
25. Paladino J, Bernacki R, Neville BA, et al. Evaluating an Intervention to Improve Communication Between Oncology Clinicians and Patients With Life-Limiting Cancer: A Cluster Randomized Clinical Trial of the Serious Illness Care Program. *JAMA Oncol* 2019;5(6):801-9.
26. Geerse OP, Lamas DJ, Sanders JJ, et al. A Qualitative Study of Serious Illness Conversations in Patients with Advanced Cancer. *J Palliat Med* 2019;22(7):773-81.
27. Sanders JJ, Miller K, Desai M, et al. Measuring Goal-Concordant Care: Results and Reflections From Secondary Analysis of a Trial to Improve Serious Illness Communication. *J Pain Symptom Manage* 2020;60(5):889-97.
28. Qureshi AA, Mohammad J, Mohammed Elkandow AE, et al. The end-of-life care in the emergency department setting with respect to the Middle East countries and comparison with the Western countries. *Turk J Emerg Med* 2022;22(1):1-7.
29. Chattopadhyay S, Simon A. East meets West: cross-cultural perspective in end-of-life decision making from Indian and German viewpoints. *Med Health Care Philos* 2008;11(2):165-74.
30. Hanssen I. From human ability to ethical principle: an intercultural perspective on autonomy. *Med Health Care Philos* 2004;7(3):269-79.
31. Kristiansen M, Sheikh A. Understanding faith considerations when caring for bereaved Muslims. *J R Soc Med* 2012;105(12):513-7.
32. Leong M, Olnick S, Akmal T, et al. How Islam Influences End-of-Life Care: Education for Palliative Care Clinicians. *J Pain Symptom Manage* 2016;52(6):771-4.
33. Hollinger-Smith L. Diversity & cultural competency in health care settings. In: 2016.
34. Richardson P. Spirituality, religion and palliative care. *Ann Palliat Med* 2014;3(3):150-9.
35. Russell J. Effects of Constraints and Consequences on Plan Complexity in Conversations About End-of-Life Care. *J Soc Work End Life Palliat Care* 2015;11(3):323-45.
36. Givler A, Bhatt H, Maani-Fogelman PA. The Importance of Cultural Competence in Pain and Palliative Care. In: *StatPearls. Treasure Is* 2024; 1(1): 1-17.
37. Kolmar A, Kamal AH. Developing a Path to Improve Cultural Competency in Islam Among Palliative Care Professionals. *J Pain Symptom Manage* 2018;55(3):1-3.
38. Block SD. Perspectives on care at the close of life. Psychological considerations, growth, and transcendence at the end of life: the art of the possible. *JAMA* 2001;285(22):2898-905.
39. Al Mutair A, Al Shaer A, Al Ghamdi F, et al. The Experiences of Muslim Family Members of Critically Ill Patients During End-of-Life Care in Saudi Arabia: A Qualitative Phenomenological Study. *Clin Nurs Res* 2020;29(6):375-81.
40. Radbruch L, De Lima L, Knaul F, et al. Redefining Palliative Care-A New Consensus-Based Definition. *J Pain Symptom Manage* 2020;60(4):754-64.
41. World Health Organization. Palliative care [Internet]. 2020 [access April 22, 2024]. Available from: <https://www.who.int/news-room/fact-sheets/detail/palliative-care>.
42. World Health Organization. Strengthening of palliative care as a component of integrated treatment throughout the life course. *J Pain & Palliative Care Pharmacol* 2014;28(2):130-4.
43. Quill TE, Abernethy AP. Generalist plus specialist palliative care--creating a more sustainable model. *N Engl J Med* 2013;368(13):1173-5.
44. Zeinah GF, Al-Kindi SG, Hassan AA. Middle East experience in palliative care. *Am J Hosp Palliat Care* 2013;30(1):94-9.
45. Connor SR, Sepulveda Bermedo MC. Global atlas of palliative care at the end of life. WHO 2018; 1(1): 1-120.
46. Fadhil I, Lyons G, Payne S. Barriers to, and opportunities for, palliative care development in the Eastern Mediterranean Region. *Lancet Oncol* 2017;18(3):176-84.

47. Clark D, Baur N, Clelland D, et al. Mapping Levels of Palliative Care Development in 198 Countries: The Situation in 2017. *J Pain Symptom Manage* 2020;59(4):794-807
48. Murray SA, Osman H. Primary palliative care: the potential of primary care physicians as providers of palliative care in the community in the Eastern Mediterranean region. *East Mediterr Health J* 2012;18(2):178-83.
49. Al-Shahri MZ, Brown S, Ezzat A, et al. Palliative care initiative for the Eastern Mediterranean Region: a proposal. *Ann Saudi Med* 2004;24(6):465-8.
50. Harford JB, Aljawi DM. The need for more and better palliative care for Muslim patients. *Palliat Support Care* 2013;11(1):1-4.
51. Al-Shahri M. The future of palliative care in the Islamic world. *West J Med* 2002;176(1):60-1.
52. Ghaly M, Diamond RR, El-Akoum M, et al. Palliative care and Islamic ethics. *WISH* 2018; 1(1): 1-16.
53. Clark J, Barnes A, Campbell M, et al. A Life or "Good Death" Situation? A Worldwide Ecological Study of the National Contexts of Countries That Have and Have Not Implemented Palliative Care. *J Pain Symptom Manage* 2019;57(4):793-801
54. Sánchez-Cárdenas MA, Pourghazian N, Garralda E, et al. Palliative care in the Eastern Mediterranean: comparative analysis using specific indicators. *BMC Palliat Care* 2022;21(1):1-18.
55. Shamieh O, Jazieh AR. Modification and implementation of NCCN Guidelines on palliative care in the Middle East and North Africa region. *J Natl Compr Canc Netw* 2010;8(3):41-7.
56. Ddungu H. Palliative care: what approaches are suitable in developing countries? *Br J Haematol* 2011;154(6):728-35.
57. Salim EI, Moore MA, Al-Lawati JA, et al. Cancer epidemiology and control in the arab world - past, present and future. *Asian Pac J Cancer Prev* 2009;10(1):3-16.
58. Mahdi H, Mula-Hussain L, Ramzi ZS, et al. Cancer Burden Among Arab-World Females in 2020: Working Toward Improving Outcomes. *JCO Glob Oncol* 2022;8(1): 1-21.
59. Al-Shamsi HO, Abu-Gheida IH, Iqbal F, et al. Cancer in the Arab world. *Spr Nat* 2022; 1(1): 1-15.
60. Temel JS, Greer JA, Muzikansky A, et al. Early palliative care for patients with metastatic non-small-cell lung cancer. *N Engl J Med* 2010;363(8):733-42.
61. Wittenberg-Lyles E, Goldsmith J, Oliver DP, et al. Targeting communication interventions to decrease caregiver burden. *Semin Oncol Nurs* 2012;28(4):262-70.
62. Zulman DM, Schafenacker A, Barr KL, et al. Adapting an in-person patient-caregiver communication intervention to a tailored web-based format. *Psychooncology* 2012;21(3):336-41.
63. van Weert JC, Bolle S, van Dulmen S, Jansen J. Older cancer patients' information and communication needs: what they want is what they get? *Patient Educ Couns* 2013;92(3):388-97.
64. Eng TC, Yaakup H, Shah SA, et al. Preferences of Malaysian cancer patients in communication of bad news. *Asian Pac J Cancer Prev* 2012;13(6):2749-52.
65. Yi H, Xiao T, Thomas PS, et al. Barriers and Facilitators to Patient-Provider Communication When Discussing Breast Cancer Risk to Aid in the Development of Decision Support Tools. *AMIA Annu Symp Proc* 2015;2015(1):1352-60.
66. Alshammari M, Duff J, Guilhermino M. Barriers to nurse-patient communication in Saudi Arabia: an integrative review. *BMC Nurs* 2019;18(1):1-16.
67. Albougami A. Role of language and communication in providing quality healthcare by expatriate nurses in Saudi Arabia. *J Hea Spec* 2015;3(3):166-72.
68. Alrimali AM, Alreshidi NM. Evaluating ICU nurses' education, practice, and competence in palliative and end-of-life care in Saudi Arabia: A cross-sectional study. *Belitung Nurs J* 2024;10(1):23-30.
69. Saleh AM. Nurses' Perceptions of Prognosis-Related Communication. *Asian Pac J Cancer Prev* 2022;23(3):775-80.
70. Obeidat R, Khrais HI. Jordanian Physicians' Attitudes toward Disclosure of Cancer Information and Patient Participation in Treatment Decision-making. *Asia Pac J Oncol Nurs* 2016;3(3):281-8.
71. Albashayreh A, Gilbertson-White S, Al Nashash D, et al. A qualitative exploration of goals-of-care discussions with seriously ill patients in Jordan. *Palliat Supp C* 2023; 1(1):1-8.
72. Abuhammad S, Almasri R. Impact of educational programs on nurses' knowledge and attitude toward pediatric palliative care. *Palliat Supp C* 2022;20(3):397-406.
73. Ibrahim H, Harhara T. Palliative care training: a national study of internal medicine residency program directors in the United Arab Emirates. *BMC Palliative Care* 2022;21(1):1-14.
74. Doumit MAA, Khoury MN, Arevian M, et al. Effectiveness of an Educational Workshop on Palliative Care Knowledge in Lebanese Nurses. *Palliat Med Rep* 2023;4(1):300-7.
75. Al-Ansari AM, Abd-El-Gawad WM, Suroor SN, et al. Knowledge and Attitude of Primary Care Physicians towards Palliative Care. Is it time for integration?. *Res Sq* 2021; 1(1):1-13.
76. Brant JM, Al-Zadjali M, Al-Sinawi F, et al. Palliative Care Nursing Development in the Middle East and Northeast Africa: Lessons From Oman. *J Cancer Educ* 2021;36(1):69-77.
77. Swed S, Bohsas H, Alibrahim H, et al. Knowledge and Attitude of Healthcare Providers Regarding Palliative Care and Related Factors: An Online Cross-Sectional Study. *Cureus* 2024;16(2):1-15
78. Osman H, Yamout R. Palliative Care in the Arab World. *Spring* 2022; 1(1):381-93.
79. Chiarchiaro J, Arnold RM, Ernecoff NC, et al. Serious Illness Communication Skills Training during a Global Pandemic. *ATS Sch* 2022;3(1):64-75.
80. Arnold RM, Back AL, Barnato AE, et al. The Critical Care Communication project: improving fellows' communication skills. *J Crit Care* 2015;30(2):250-4.
81. Grudzen CR, Emlet LL, Kuntz J, et al. EM Talk: communication skills training for emergency medicine patients with serious illness. *BMJ Support Palliat Care* 2016;6(2):219-24.
82. Adeyemi O, Ginsburg AD, Kaur R, et al. Serious illness communication skills training for emergency physicians and advanced practice providers: a multi-method assessment of the reach and effectiveness of the intervention. *BMC Palliative Care* 2024;23(1):1-14.
83. Amjad A, Kordel P, Fernandes G. A review on innovation in healthcare sector (telehealth) through artificial intelligence. *Sustainability* 2023;15(8):1-16.
84. Chua IS, Ritchie CS, Bates DW. Enhancing serious illness communication using artificial intelligence. *NPJ Digit Med* 2022;5(1):1-14.
85. Paladino J, Sanders JJ, Fromme EK, et al. Improving serious illness communication: a qualitative study of clinical culture. *BMC Palliative Care* 2023;22(1):104-11.
86. Sollecito W, Johnson J. McLaughlin and Kaluzny's continuous quality improvement in health care. *J & Bar* 2011; 1(1): 1-350.
87. Hill JE, Stephani A-M, Sapple P, et al. The effectiveness of continuous quality improvement for developing professional practice and improving health care outcomes: a systematic review. *Implem Sc* 2020;15(1):1-23.
88. Ferrell BR, Twaddle ML, Melnick A, et al. National Consensus Project Clinical Practice Guidelines for Quality Palliative Care Guidelines. *J Palliat Med* 2018;21(12):1684-9.