NARRATIVE REVIEW

Status of the palliative care education in surgical postgraduate curriculum — implications for Pakistan

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Abstract

Palliative care has gained considerable attention during last few decades. Increasing demands by the society owing to increased number of elderly and people with chronic illnesses require increased number of health care professionals with competence in providing palliative care. The current review provides a summary of the published literature pertaining to palliative care education in surgical residency programmes internationally and locally. Most surgical residency programmes provide limited, if any, formal education in knowledge and skills related to palliative and end of life care. The situation is alarming in Pakistan where the discipline is in infancy and resources are limited while the demand for palliative care is increasing. Surgery can learn lessons from other disciplines. Development and integration of palliative medicine into most of the existing postgraduate curricula continues to be a challenge for the accreditation bodies and medical educationists. Collaborative measures need to be taken urgently at all levels.

Keywords: Palliative care education, Palliative medicine, Palliative surgery training, Surgical residency curriculum.

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Introduction

Medical dictionaries define palliative care (PC) as "supportive care interventions that help the patient achieve comfort but do not affect the course of a disease".[1] According to WHO, palliative care is "an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual".[2] Another term 'Hospice care' has also been commonly used in the literature, often interchangeably with palliative care. However as differentiated by Hui D et al, in their systematic review, palliative care could begin at the time of diagnosis and/ or treatment, while hospice care begins after treatment of the disease is stopped and when it is clear that the person is not going to survive the illness more than 6 months.[1]

Palliative care has been shown to benefit all the patients with life long, life threatening or multiple chronic or complicated acute conditions, independent of prognosis.[3] In addition to the improved patient outcomes in terms of extended survival and enhanced quality of life of patients, palliative care also provides psychological support to the patient and families in death and bereavement, and facilitates patients to embrace death with dignity.[1] Moreover, palliative care has also been shown to reduce the overall health care system costs when planned and executed adequately.[1]

The growing number of elderly people with terminal illnesses and chronic morbidities warrants increased number of professionals competent in providing palliative care to fulfill the ever-increasing demands of the society.[3] The increasing recognition of the role of palliative care by physicians, hospital administrations, professional organizations and medical educationists has led to efforts to incorporate palliative care and end of life care (EOLC) education into the health professions education.[4,5]

A large number of studies are available describing the development, incorporation, and impact of palliative care education into the undergraduate medical and nursing curricula.[6] Significant amount of literature is also available regarding palliative care education in non-surgical postgraduate training programmes.[4,6] However there appears to be a paucity of literature regarding palliative care education in surgical postgraduate programmes particularly from Pakistan, although a lot has been written about the role of surgery in palliative care.[4,7,8]

The purpose of the current review article is to summarize the published literature pertaining to training and education of postgraduate trainees generally and surgical specialities specifically, in palliative and end of life care

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globally, and in developing countries with special reference to Pakistan. It is important to mention here that majority of the published literature on palliative and end of life care from the developing world including Pakistan is related to service component; only limited studies have focused on the educational and training aspect of the palliative care. Additionally, this review provides a brief outline of the various components of palliative care education, and suggests examples of educational initiatives from other residency programmes that could be replicated to develop indigenous residency curricula for surgical residents locally.

Search Methodology

MEDLINE, PubMed, CINAHL, Google scholar and PakMediNet (for articles published in local journals) were searched using the keywords 'palliative care education' or 'palliative care training' AND 'postgraduate medical education', 'surgery residency training', and 'surgery residents' for relevant articles published till 2018. The reference lists of identified papers were also searched for relevant articles. The search was further amplified by manual search of most relevant and accessible journals including but not limited to Journal of Palliative Medicine, Annals of Surgery, American Journal of Hospice and Palliative Medicine and Indian Journal of Palliative Care.

Components of Palliative Care Education

The palliative and end of life care education may be broadly divided into clinical and non-clinical components. The 'clinical' component includes identification and assessment of patients requiring palliative care, decision making regarding selection of most appropriate management option, nutrition, use of opioids and analgesia for control of pain, non-pain symptom management, selection and management of syringe drivers for drug delivery, difficulties associated with diagnosing terminal phase of illness (prognostication), issues related to resuscitation and withdrawal or withholding of life support, and role of multidisciplinary and interdisciplinary hospice team, in caring for the terminally or chronically ill patients.[4,6]

While aspects of specialized clinical palliative care are integrated into the respective residency training, there is a general lack of supervision and adequate training in 'non-clinical' components or softer skills related to palliative care in postgraduate medical education worldwide. This includes end of life communication, ethics and laws regarding palliative and end of life care, psychosocial and spiritual needs, dealing with emotional pressures and taking care of self.[9,10] The manner in which residents approach a terminally ill patient is primarily based on their beliefs, culture and prior experiences with end-of-life care.[11] Implications of this lack of training are multifaceted; care may be compromised often increasing the hospital stay and cost of care, there may be dissatisfaction on part of the patient and family, and residents or trainee physician; and residents often experience emotional distress affecting their overall performance and educational experience.[12,13]

Status of Palliative Care Education in Postgraduate Medical Education Curricula Globally

In clinical disciplines, postgraduate trainees have to manage a number of terminally or chronically ill patients and deal with death and the dying. These trainees are expected to have gained these skills during their undergraduate medical education after the inclusion of palliative care as a core component in undergraduate medical curricula. Unfortunately, current training about palliative and end of life care in undergraduate medical schools is inadequate and has failed to prepare the graduating doctors to care for the dying.[5] Variation in the content, methodology, locations used for teaching palliative care, competence of teaching faculty and lack of exposure to patients requiring palliative care during clinical years in undergraduate medical education has elevated concerns about level of training and preparedness of doctors being developed to manage palliative care (PC) and end of life care (EOLC) needs of the patients.[5,12-13]

These inadequacies provided the impetus for certifying and accrediting organizations and medical educationists worldwide to incorporate palliative care into existing postgraduate curricula to address the dire need for palliative care. The Accreditation Council on Graduate Medical Education (ACGME) mandated palliative care education to be part of any residency programme.[10] Yet, development and integration of palliative medicine into the existing postgraduate curricula continues to be a challenge for medical educationists. A review of the content of 50 top-selling textbooks across wide range of medical, paediatric, psychiatric and surgical disciplines showed that disease-focused chapters had little or no information regarding caring for patients at end of life generally or dying from these specific diseases.[15] Most residency programmes lack a structured, systematic training in all aspects of end of life and palliative care while educational and clinical experiences regarding palliative and end of life care are extremely variable across disciplines, settings and institutes.[6,9] Where present, teaching is mainly focused on acquisition of knowledge and skills with minimal focus on attitudes and ethical

principles,[15] whereas formal assessment of palliative care is rare.

Evidence from available literature suggests minimal formal training of non-specialist physicians in palliative and end of life care with inconsistencies in amount and type of knowledge and skills imparted.[4,6] Use of palliative sedation in end-of-life care continues to be a greatly debated issue in medical practice despite the availability of practice guidelines.[13] Opioids are fundamental in acute pain management, yet numerous studies have shown incorrect prescription of opioids by physicians resulting in poor pain management and side effects.[13,14] Residents learn to manage acute and chronic pain during the job rather than through formal education.[13] Narrow focus on varying and wider aspects of palliative care has affected even specialist oncologists' competence in core elements of palliative care practice[6]. Delivering effective palliative care to older people with end-stage dementia and identification of patients with non-cancer diseases who can benefit from palliative care continues to be an issue for physicians, worldwide.[16]

Literature is full of evidence identifying serious issues with physician's knowledge and communications regarding disease prognosis, advance care planning and transition to palliative care.[9,11,17] According to a study, when discussing about resuscitation and end-of-life decisions with patients, residents generally focus more on resuscitation itself instead of paying attention to the processes that might facilitate patient decision making.[10] Dealing with emotional aspects of discussion has generally been identified as the most challenging part of end-of-life communication, even more in case of paediatric patients.[9] Irony is, although residents are actively involved in care of dying patients, they are usually not present at the time of discussions related to death, thus gaining minimal or no learning experiences in end of life communication.[12] Considerable variation exists in bereavement practices even among oncologists owing to the lack of clarity regarding their role.[10]

Palliative Care and Surgical Disciplines

Palliation and surgery have a historical association. The word 'palliative' was first used by a surgeon, a urologic oncologist, who established the world's first acute care hospital in-patient palliative care service at the Royal Victoria Hospital in Montreal in 1974.[1] Surgeons, irrespective of their specialty, encounter a wide spectrum of death and dying in their daily practice — this may be a patient with severe trauma, burn, inoperable bowel obstruction, inoperable ischaemic limbs, advanced stage cancer or a critically ill patient in a surgical intensive care unit (SICU); death may occur unexpectedly due to internal catastrophes such as bleedings, ruptures or perforations; occur peri-operatively in a patient with multiple morbidity and chronic diseases; may be secondary to a post-operative complication or infection or multisystem organ failure or ensue as an expected outcome after a transplant procedure.[7,18]

The American College of Surgeons had been instrumental in recognizing and advocating palliative care for serious and terminally ill patients and their families under surgical care.[10] Surgical palliative care is the treatment of suffering and the promotion of quality of life for patients who are seriously or terminally ill under surgical care and prolonged survival has been identified as potential outcome for palliative surgical procedures that were previously recommended for symptom control only.[7] With the estimated increase in the global burden of cancer, surgeons can play a pivotal role in providing palliative care to patients either as primary care providers or as part of multidisciplinary teams for managing patients with chronic disease or cancers.[18] Surgical patients, who receive palliative care, have been reported to live significantly longer than medical patients.[19] Unfortunately referrals from surgical services for palliative care consultations are much less, and fewer surgical patients receive palliative care in the year prior to death, when compared with their medical counterparts.[18]

Palliative Care in Surgical Postgraduate Medical Education

Training in palliative care is not only important to oncologists and physicians, but gaining experience with and improving existing attitudes toward palliation in cancer is also of major concern to surgeons who see and manage cancer and chronically ill patients with organ failure every day.[17,19] Palliative care competencies in surgical training have been shown to improve care of surgical patients with advanced or life-threatening illnesses, decreased length of stay in the SICU and earlier consensus on goals of care, without increasing mortality.[7,18] With recognition of palliation role in surgery, initiatives have been taken at the level of accrediting bodies to incorporate palliative care education in surgical postgraduate medical education. Competence in knowledge and skills related to palliative care has been identified as one of the requirements for certification by the American Board of Surgery.[9] Surgeons are not only expected to become medical experts and technically proficient, but there is increasing emphasis to dedicate time to the development of "soft skills" such as communication, advocacy, management, and professionalism.[17] Delivering bad news and dealing with

Table-1: Components of an effective surgical palliative care curriculum.

Clinical skills	Non-clinical skills
◆ Principles of palliative care – adult and paediatric ◆ Code status ◆ Surgical palliation Decision making ◆ Patient selection ◆ Intervention selection ◆ Patient Assessment and Prognosis ◆ Advance care planning & process of care ◆ Pain management ◆ Selection and dosage of analgesics ◆ Use of opoids ◆ Symptom Management ◆ Nutrition Management ◆ Standardized processes for withdrawal of life support ◆ Interdisciplinary & multidisciplinary collaboration and referrals ◆ Palliative/ hospice/ home care ◆ Psychiatrist ◆ Oncologist	◆ Communications skills ◆ Breaking bad news ◆ Prognostic discussions ◆ Discussing advance directives ◆ Discussing progression to palliative care ◆ Withholding and withdrawing life support ◆ Do Not Resuscitate discussions ◆ Ethical and Legal issues ◆ Self-care ◆ Surgeon-Patient Relationship ◆ Recognition of other need of patients and families ◆ Psychosocial support ◆ Emotional suport ◆ Spiritual support ◆ Bereavement follow-up

advancing chronic conditions and providing care at end-of-life has been made part of general surgery milestones by the Accreditation Council for Graduate Medical Education.[7] The American College of Surgeons and Surgical Council on Resident Education also developed palliative care curriculum and guidelines for end of life care specifically for surgical residents.[6,9,19]

Despite all such efforts, unfortunately most surgical residency programmes provide limited, if any, formal education in palliative care. Although many internal medicine, family medicine and paediatrics residencies have incorporated structured palliative care teaching into their programmes, fewer surgical residency programmes have designed and implemented discrete palliative care curricula. Literature reports significant deficiencies in training during residency and continuing medical education in surgical disciplines with respect to palliative care.[8,17] More than 80% surgeons receive no education in palliative care medicine and pain management during their residency training while almost 25% of surgical oncologists have had no continuing medical education (CME) in palliative care.[19]

Books on palliative medicine have minimal content coverage regarding surgical palliation while surgery textbooks generally lack content related to palliative or end of life care such as quality of life and symptom management.[20] This sub-optimal focus on surgical palliation may affect surgeons' decision-making ability to offer consensus treatment option for palliative intervention for common symptom management or in advanced conditions to suit individual patient's needs.

In addition to deficiencies in clinical palliative care skills mentioned earlier, studies have identified sub-optimal softer skills among surgery residents such as selection of words in delivering bad news, dealing with ethical issues related to disease disclosure to the patient or family, responding to their subsequent emotional reactions and recognizing the need for referral to psychiatrist.[15,21] Formal programmes to teach these competencies are lacking. Table-1 gives an overview of different components of a proposed palliative care curriculum for surgeons.

Palliative Care Service and Education in Pakistan

Approximately 75% patients in the developing world suffering from active life-limiting disease require palliative care.[3] With improved longevity, and cancer and HIV/AIDS epidemic, this figure is expected to rise by 25% in 2040 representing the magnitude of need for palliative care in developing and low income countries.[3] Pakistan is one such resource-poor country where palliative care is urgently required. Yet, being a low priority area with multiple competing health demands for physicians, palliative care services are only in the initial phase of development in our country.[21] Some of the barriers to development of palliative care services in Pakistan include lack of national policies related to palliation, strict national drug regulations, poorly developed health care systems, and lack of knowledge of health professionals at all levels.[22,23]

Palliative care is not included in the National Plan of Non-

Communicable Diseases, neither is there a National Palliative Care Policy. Although a National Cancer Control Plan for prevention, diagnoses, treatment and palliation was developed as per WHO recommendations, its implementation in Pakistan remains poor. Pakistan was identified having "least favourable ratio" of patients served by a palliative care facility i.e. only 1 service for a population of 157,935,000, and is thus placed in "localized provision" category by the International Observatory at End of Life Care (IOELC).[22]

Palliative care is not available at any public hospital in the country. A full multidisciplinary palliative care team exists only in two or three institutions in Pakistan. Other hospitals have some form of pain and symptom control only; other aspects like psychological, social and spiritual support are mostly unmet.[21] The concept of offering palliative support from beginning of diagnosis is also limited to some professionals working in oncology units; in most of the places patients are referred to palliative care team only when treatment options have failed[8]. There is lack of consensus among health care professionals on understanding and standard protocols regarding brain death, end-of-life recognition, indications and processes of withdrawal of life support, while cultural and religious differences add to the complexity of issue.[23] With the exception of haematological malignancies, most cancer patients present to surgeons as primary care providers. Since most of the surgeons lack any surgical oncology training, they are unable to provide standard treatment following oncological surgical principles.[24] Paediatric palliative care also remains in the early stages of development.

The status of palliative care education in undergraduate and postgraduate medical education locally is also alarming.[8] All medical colleges in Pakistan are governed by Pakistan Medical and Dental Council (PMDC) and sadly palliative care is not included in the undergraduate medical curriculum developed by PMDC.[25] Personal experiences, discussion with peers, and/ or exposure to electronic media, and not curriculum, have been identified as sources of awareness regarding end of life palliative care among medical students.[8,26] Communication skills and medical ethics have been included in the undergraduate and postgraduate curriculum as one of the core competencies by the PMDC and College of Physicians and Surgeons, Pakistan (CPSP).[25] Yet a large majority of doctors from different parts of Pakistan lacked knowledge in cancer detection and medical ethics; they could not break bad news properly and experienced anxiety while doing so indicating a need for formal education and training in these areas.[26] CPSP has initiated a two-year fellowship programme in UK in collaboration with NHS to develop the skills and clinical experience of residents in palliative medicine. CPSP has also recognized fellowship in surgical oncology recently, but this is currently available only in one center in Pakistan. Nevertheless, palliative care education is not part of any formal structured residency programme in Pakistan. A significant number of doctors lack training in palliative medicine, pain control, breaking bad news, communication skills and terminal care.[23,26] Early-career oncologists have also identified a need for increasing professional education in cancer.[27] Residents mostly learn these skills by trial and error while on job or become a victim of the 'hidden curriculum'. The oncology units, where present, are however playing important role in teaching and setting standards of care by conducting tumour board meetings, and other CME activities.[27]

Suggestions for Palliative Care Education in Pakistan

With the recognition of gap in residency training related to palliative care education, different strategies have been described in literature to address this deficiency and inculcate competencies related to palliative care in their residents. Some of these strategies are: use of didactic teaching approaches, small group discussions, role-plays, interactions with simulated patients and videos of clinical encounters.[28] Development of protected block modules, case-based modules, workshops and seminars related to palliative care and pain management,[28] 'Oncotalk'- communication workshops for improving communication skills related to cancer patients,[29] and using ICU rotation and geriatric clerkship as venues for teaching end-of-life skills[30] can allow introduction of structured palliative care education in an already compact residency curriculum considering the resident work hour restrictions and faculty service components. Other educational interventions reported include monthly 'Death Rounds' to discuss issues and emotions surrounding the care of dying patients,[31] introduction of one month mandatory rotation in palliative care department for surgical residents to teach pain management,[32] use of simulation and technology in the form of web-based interactive, self-directed palliative care,[33] and smartphone apps related to palliative care are also available and can be used as teaching tools[34] for acquisition of knowledge and skills related to end of life care. Studies have also looked into multidisciplinary training and teamwork, as is the underlying principle of palliative care, using interdisciplinary curriculum.[35]

It is, however, important to remember that a structured didactic curriculum cannot replace experiential teaching,

which is the soul of surgical residency training and ensures direct knowledge and skills acquisition.[36] It is, therefore, also important to develop respective faculty so that residents have maximum benefit from clinical encounters. Developing collaboration with international organizations that are already working on development of palliative care curriculum and related educational material would optimize existing resources and expand the scope of efforts at national level. In the context of Pakistan, teaching programmes also need to consider incorporation of cultural and religious differences in their ethics and palliative care curricula.[15,37]

Conclusion

There is an urgent need to incorporate palliative care in surgical residency programmes globally. This review paper has identified the deficiencies in education of palliative care in postgraduate surgical education and suggested different approaches used in other disciplines to incorporate formal palliative curricula into the existing residency training. Efforts should be made at developing and improving palliative care curricula in collaboration with international agencies and organizations; developing process for certification of competence in end of life care; creating and enhancing educational resources for end-of-life education; faculty development; developing palliative care clinical programmes as venues for experiential and clinical education; textbook revisions; and creating palliative care fellowship training opportunities.

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