Cancer, cancer pain and the ‘Cancer Pain Initiative’

Tariq Hayat Khan

Consultant Anesthesiologist & Pain Specialist, Islamabad

Correspondence: Dr. Tariq H. Khan, APICAREHQ, 25–R, Ibn–e–Sin Road, G–10/3, Islamabad–44000, Pakistan; Phone: +92 321 514 9709; E-mail: apicare@yahoo.com

Abstract

The number of cancer patients has been steadily increasing and with it the number of cancer related pain patients is also increasing. Cancer pain (CP) is the most unique and versatile pain, regarding type, intensity, site, variations and the needed management modalities. No one pain specialist or the pain center can be capable of adequately manage every cancer patient. In this background, an idea to confront this menace at a national level with a combined effort is presented. If implemented it is hoped that the CP patients will get rid of at least the worry about their excruciating pain. The idea of the ‘Cancer Pain Initiative’ has been in circulation for quite some time, but needs to be discussed at various levels.

Key words: Cancer; Cancer pain; Pain management

Citation: Khan TH. Cancer, cancer pain and the ‘Cancer Pain Initiative’. Anaesth. pain intensive care 2021;25(2):126–12. DOI: 10.35975/apic.v25i2.1482

1. Cancer

Cancer is as real as any other disease in the world. It can be cured like many other diseases, but a large number of patients with cancer have to live with it. It is known as a killer disease and approximately 10.3 million people could be killed per year by cancer. In 2020 alone, 16 million new patients were diagnosed with cancer. The worst hit countries fall in the continents of Asia, Africa and Australia.1 It is estimated that in future, the burden of cancer will markedly rise due to the changes in the lifestyle which have been associated with an increased risk of cancer. Smoking epidemic, sedentary life style and lack of physical activity, improper diet and a decreased number of pregnancies in under–developed countries, have been claimed to be the main factors.1 The upward trend in the number of patients is linked with another important factor; with the progress made in early diagnosis, new more effective chemotherapeutic agents, radio isotope, improved surgical techniques and other treatment modalities, the mortality from cancer has been fallen by more than 31% during the last two decades. The largest drop was witnessed from 2017 to 2018, and it was 2.4% in a single year. It was estimated that 16.9 million cancer patients survived in USA alone by 2019, with a projected number of more than 22.2 million by 2030.2–4

In Pakistan, in 2020, number of new cases registered was 178388; number of cancer–related deaths was 117149 and the number of prevalent cases (5–year) was 329547. As the facilities of cancer treatment are improved in the country, all these figures are likely to increase with every passing year.5

Cancer is not restricted to a single body organ; the most common cancers are breast cancer, lung cancer, prostate cancer, colorectal cancer, and melanoma of the skin. Ironically, the cancer comes silently, but rapidly progresses to manifest itself with pain. In a survey, it was estimated that 5 million or more cancer patients are suffering from pain with or without adequate therapy; 57% patients perceive cancer death painful, and 69% even consider committing suicide due to pain. Cancer related pain can be found in 75% of the patients with advanced disease. 25% to 30% are found to be suffering from severe pain at the time of initial diagnosis.3–4

2. Cancer pain

Cancer pain has some of the unique features of its own. It may be subacute, acute, chronic, or acute on chronic pain. It manifests itself in every shade of the acute or chronic pain. It may be nociceptive (arising from skin, viscera, muscles, connective tissue). Somatic pain is the most common type of pain, and bone metastasis is the most common cause of it. Other tissues involved are skin and muscles. Pain is described as aching, stabbing, or throbbing. Visceral pain commonly originates in organs
or viscera and is referred to cutaneous sites. It is usually described as gnawing, cramping, aching, or sharp pain. The other main type of pain is called neuropathic pain, which commonly arises as a result of injury to the peripheral or central nervous system (CNS). Despite widespread recognition of the menace of cancer pain, in most of the cases it remains inadequately treated. The barriers to effective pain management are not restricted to the patients only, but the treating physicians and the nursing staff also have been found reluctant to have an aggressive approach to address the pain. Inadequate assessment of pain due to poor clinical training of the healthcare professionals is one of the main factors. Unfound misconceptions about the use of opioids, especially about the associated side-effects, are one of the major reasons for the physicians not to prescribe, and for the patients to accept the opioids happily. Nursing staff finds a crying patient more gratifying than a deeply asleep one, after taking the opioids. Government regulations in many of the countries have also been a big hurdle to free access to the opioid based drugs.

With the passage of time, pain management has evolved as a specialty in its own right. Various junior and higher level diplomas are being offered in various countries. World Institute of Pain (WIP®), International Association for the Study of Pain (IASP®) and country level pain societies have been continuously endeavoring to promote sound and ethical practice of pain. IASP celebrated Global Year Against Cancer Pain from October 2008 to October 2009 to create awareness about cancer pain (CP). It focused on a central theme of “Raising Awareness • Improving Treatment • Growing Support”. This year–long campaign aimed to foster greater understanding of the serious pain cancer patients often confront and, ultimately, provide more effective and accessible treatment options to minimize pain and suffering. CP is now a part of curriculum of pain medicine courses.

Despite the tremendous progress having been made, CP still remains inadequately managed. It starts with prescription of non–opioid analgesics as the first step of the WHO ladder, and steps up to the recently added fourth step. It includes numerous non–pharmacological procedures that are robust recommendations for treating persistent pain, even in combination with the use of strong opioids or other medications. This group includes various interventional and minimally invasive procedures such as epidural analgesia, intrathecal administration of analgesic and local anesthetic drugs with or without pumps, neurosurgical procedures (e.g., lumbar percutaneous adhesiolysis, cordotomy), neuromodulation strategies (e.g., brain stimulators, spinal cord stimulation), nerve blocks, ablative procedures (e.g., alcoholization, radiofrequency, microwave, cryoablation; laser–induced thermotherapy, irreversible electroporation, electrochemotherapy), cementoplasty as well as palliative radiotherapy.

3. ‘Çancer Pain Initiative’

It can be seen that to be mastering of all CP management modalities is well beyond the human capability. A pain specialist will be expert in some modalities, but not many of the others. Similarly, a pain clinic or center will be well–equipped to offer some of the treatment modalities, but all of the others. Moreover, most of the times, CP management requires a team of experts to work in harmony for adequate pain relief. This was the background, which gave birth to my idea of ‘Çancer Pain Initiative’ (CPI).

The objective of CPI is to offer a comprehensive plan for pain relief to cancer patients at a place of their convenience, by a pain specialist with the appropriate level of expertise in the target modality and at a price according to their affordability. It only requires a network of willing pain practitioners, institutions and healthcare professionals plus means of communications.

The existing pain centers can be approached to register with CPI, if they accept the terms and conditions. These pain centers would serve as a hub for imparting relief to cancer patients as well as work as training centers to pain enthusiasts from the peripheral hospitals. The centers, public as well as private sector, will be inspected and categorized according to the available facilities:

A (Pink): Every possible treatment facility plus expertise available.

B (Mauve): Partial treatment facilities and/or partial expertise available.

C (Blue): Few treatment facilities and/or low level expertise available.

Regarding private sector centers, some centers will only be selective to accept the patient according to the category.

The patients can be categorized into three categories on the basis of affordability as follows:

I (Pink): Non–affording or zakat dependent patients will be offered total free management. The clinics and the experts will waive–off their charges, and will generate funds to cater for the expenses on the drugs, equipment and procedures.
2 (Mauve): Affording or partially affording patients will be treated on cost basis or on reduced rates.

3 (Blue): Well–affording patients will be managed on full charges, and they will be expected to sponsor at least one category–1 patient.

The patients can also be categorized on the basis of their affordability and the ease of maneuverability.

1st Degree: Patients can move or be transported to the best matched pain center with pain management team with the best matched expertise, if the patient is capable and can afford to travel to the center, or the treatment facility can only be delivered at a particular center.

2nd Degree: Patient is shifted to a nearest center with necessary facilities, but no expertise. The expert from a remote center devotes his/her time to visit and treat that patient at the remote center.

3rd Degree: Patient cannot be moved from his/her home. Treatment is administered by the expert at home (whatever is humanly possible to relieve the pain under the circumstances).

To fulfill the dream, we need concerted efforts to establish CPI at the national level. It only requires dedication and sincere effort as there are already more than two dozen institutions managing cancer, and an equal number busy in pain management. There are also more than eight cancer specific NGOs, which are involved in documentation and welfare activities for the cancer patients. They need to realize the need to join hands and form a single forum – CPI, to treat the menace of CP. CPI will need to make a directory of all pain practitioners and their expertise and skill levels in pain management. In this way, we could direct a particular patient to consult the best expert matching his/her disease and the required treatment. Similarly, centers and the facilities as well as the expertise available at there for managing CP will need to be documented. A central helpline could be of much help, to guide people according to the location and condition of the patient. An android app will also be helpful in this regards.

Today, it is just a wishful thinking, but through humane approach and sincere, combined efforts, it can be a reality tomorrow.

Conflict of interest
None declared by the author.

References

1. Bray F, Moller B. Predicting the future burden of cancer. Nat Rev Cancer. 2006 Jan;6(1):63–74. doi: 10.1038/nrc1781. [PubMed] DOI: 10.1038/nrc1781

2. Ferlay J, Soerjomataram I, Dikshit R, Eser S, Mathers C, Rebelo M, Parkin DM, Forman D, Bray F. Cancer incidence and mortality worldwide: sources, methods and major patterns in GLOBCAN 2012. Int J Cancer. 2015 Mar 1;136(5):E359–86. [PubMed] DOI: 10.1002/ijc.29210

3. Parkin DM, Bray F, Ferlay J, Pisani P. Global cancer statistics, 2002. CA Cancer J Clin. 2005 Mar–Apr;55(2):74–108. [PubMed] DOI: 10.3322/canjclin.55.2.74

4. Goudas LC, Bloch R, Gialeli–Goudas M, Lau J, Carr DB. The epidemiology of cancer pain. Cancer Invest. 2005;23(2):182–90. [PubMed]

5. Pakistan – Global Cancer Observatory. [Internet] Available on: https://gco.iarc.fr/today/data/factsheets/populations/586–pakistan–fact-sheets.pdf

6. Caraceni A, Weinstein SM. Classification of cancer pain syndromes. Oncology (Williston Park). 2001 Dec;15(12):1627–40, 1642; discussion 1642–3, 1646–7. [PubMed] [Free full text]

7. Anekar AA, Cascella M. WHO Analgesic Ladder. [Updated 2020 May 17]. In: StatPearls [Internet], Treasure Island (FL): StatPearls Publishing; 2021 Jan–. Available from: https://www.ncbi.nlm.nih.gov/books/NBK554435/

8. Di Napoli R, Esposito G, Cascella M. StatPearls [Internet]. StatPearls Publishing; Treasure Island (FL): Jul 31, 2020. Intrathecal Catheter. [PubMed]

9. Cascella M, Muzio MR, Viscardi D, Cuomo A. Features and Role of Minimally Invasive Palliative Procedures for Pain Management in Malignant Pelvic Diseases: A Review. Am J Hosp Palliat Care. 2017 Jul;34(6):524–531. [PubMed]

10. Kanpolat Y. Percutaneous destructive pain procedures on the upper spinal cord and brain stem in cancer pain: CT–guided techniques, indications and results. Adv Tech Stand Neurosurg. 2007;32:147–73. [PubMed]

11. List of cancer hospitals in Pakistan. Wikipedia. [Internet] 29 January 2021 (Cited 23 February 2021). Available from: https://en.wikipedia.org/wiki/List_of_cancer_hospitals_in_Pakistan

12. Pakinfomedics. PAEC Cancer Hospitals in Pakistan [Internet] 2021. (Cited 23 February 2021). Available from: https://www.pakinfomedics.com/List_of_PAEC_Cancer_Hospitals_in_Pakistan.htm