Universe International Journal of Interdisciplinary Research
(International Peer Reviewed Refereed Journal)
DOI No. – 08.2020-25662434

© UIJIR | ISSN (O) – 2582-6417
JULY 2025 | Vol. 06 Issue 02
www.uijir.com

ROLE OF PHYSICAL THERAPY TO IMPROVE QUALITY OF LIVING IN CANCER PATIENT

Author's Name: Dr. Pushpa Ladwal[1], Hitesh Kumar[2], Dr Rupa Pathak[3], Dr. Waseem Haide[4]

Affiliation:

1. Assistant Professor in Physiotherapy Department of Jagannath University Delhi NCR Bahadurgarh, India.
2. Senior Software Engineer in Oracle India Pvt Limited Bangalore, Karnataka, India.
3. CEO of Phy-Movements Physiotherapy and Rehabilitation Clinic, Thane, Maharashtra, India.
4. Sr Consultant, The Spine Clinic East Delhi, India.

Corresponding Author Name & Email Id: Dr. Pushpa Ladwal, ladwalpushpa365@gmail.com.

ABSTRACT

Cancer is a non-communicable disease which can be widely spread all over the world. In India, it is a second most cause of morbidity and mortality. Based on the increasing trends of cancer patients during the last few decades, the numbers of cancer patients have been predicted and over 8.8 lakh deaths by the end of 2020 in India. Cancer cases are increasing rapidly among Indian population, because of the low awareness and late detections. There is evidence that physiotherapy approaches prevent the complications and side effects and during treatment .during treatment and improve the quality of life in cancer patients.

Keywords: Physical Therapy, Quality of Living, Cancer Patient

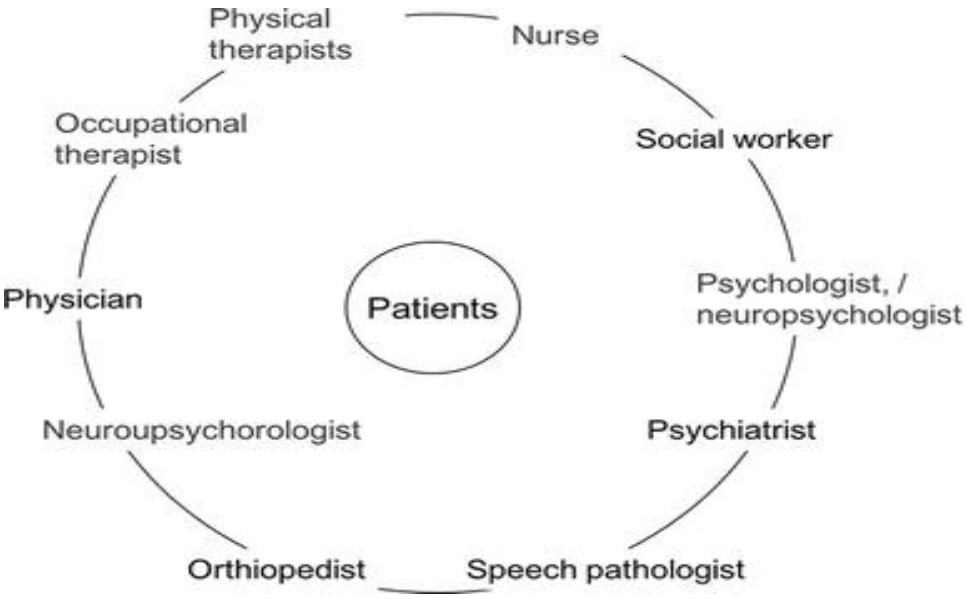
DOI Link :: https://doi-ds.org/doilink/07.2025-99313242/UIJIR

Universe International Journal of Interdisciplinary Research
(International Peer Reviewed Refereed Journal)
DOI No. – 08.2020-25662434
© UIJIR | ISSN (O) – 2582-6417
JULY 2025 | Vol. 06 Issue 02
www.uijir.com

INTRODUCTION

India is the second most populous country of the world. Being a developing country; India has many concerns to deal with e.g. poverty, illiteracy, hunger, unemployment, diseases etc. Currently, India is dealing with the burden of non-communicable diseases[1].Noncommunicable diseases are emerging as a major public health problem globally. It is not only the disease of developed countries but also affecting the developing countries. Cancer, a non-communicable disease originating as the pandemic of this century, as per Indian population census data, cancer is the second most common disease responsible for maximum mortality with about 0.3 million deaths per year [2]. According to National Cancer Institute "Cancer is a term used for diseases in which abnormal cells divide without control and are able to invade other tissues. Cancer cells can spread to other parts of the body through the blood and lymph systems.

Physical therapists often use four cancer rehabilitation stages and identify the stage before physical therapy for cancer patients [3]. There are different approaches for therapy of cancer patients during each stage.



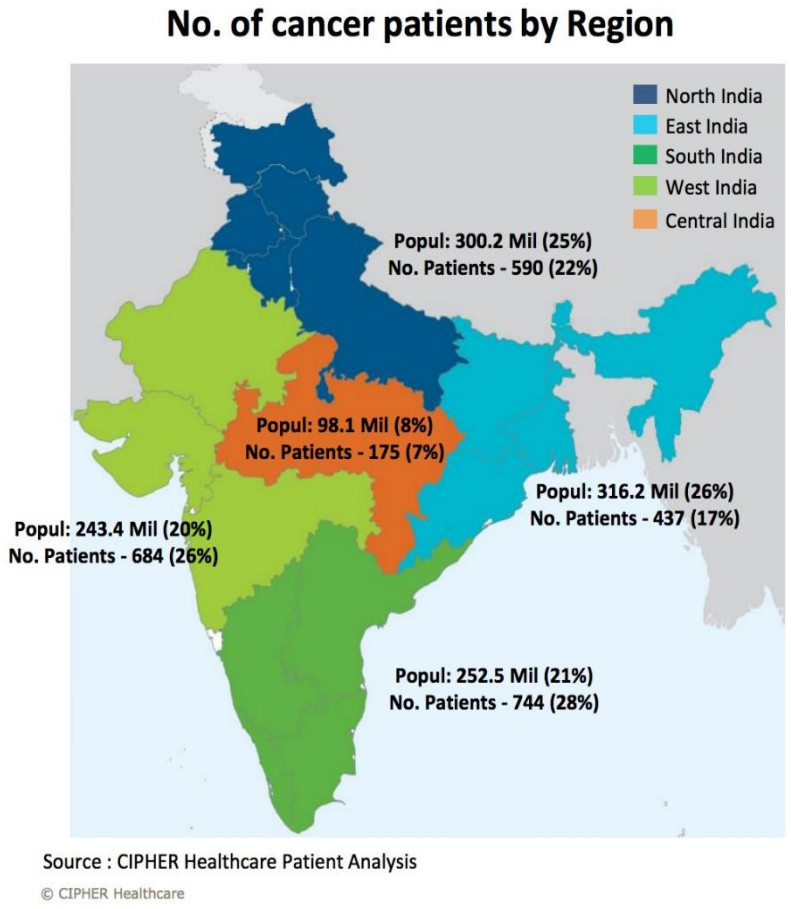
Rehabilitation team for cancer patients.

As for gynecological cancer, physical therapists can help women with sexual problems related to pelvic floor issues after treatment. Pelvic floor can be deconditioned, may have weak and tight muscles, and sometimes adhesions from surgical scars [4]. Relaxing tight muscles, strengthening weak muscles, scar tissue auto mobilization and visual biofeedback can help relieve any pelvic pain and improve function [5].Patients with COPD can benefit from physical therapy which could increase their pulmonary volumes prior and post-surgery, and improve pain and gait affected by the chemotherapy [6]. Physical training program for patients undergoing rectal cancer resection had favorable effects on muscle strength and physical capacity, and decreased the complications of surgery and the recovery period [7]. As for gynecological cancer, Cancer is the second most leading cause of

DOI Link :: https://doi-ds.org/doilink/07.2025-99313242/UIJIR

© UIJIR | ISSN (O) – 2582-6417
JULY 2025 | Vol. 06 Issue 02
www.uijir.com

death. Day by day cancer cases are increasing rapidly among Indian population because of low awareness and late detection. Based on the increasing trends of cancer patients during the last few decades, the numbers of cancer patients have been predicted by the end of 2020 in India [8].



AIM AND OBJECTIVES

This study aims to provide a review of published data on the Importance of Physical Therapy in cancer. This review serves as awareness of Physical Therapy in cancer patients for prevention of adverse effects after and during treatment. A comprehensive review was undertaken by database search terms included keywords such as cancer, cancer burden in India, cancer and physiotherapy, Physiotherapy treatment. A variety of combinations of these words were entered The approval of the ethical committee of the faculty of medicine at the Lebanese university was first obtained. To be able to get the necessary data to meet the objectives of the study, the oncologists working in Lebanon were targeted. The orders of the physicians in Beirut and Tripoli were contacted and the needed data to communicate with the oncologists was secured. The Lebanese society of medical oncology was also contacted and its president confirmed that there are 77 oncologists working in Lebanon.An electronic questionnaire, in English and French, was created using “google form. Questions targeted the assessment of perception of physical

DOI Link :: https://doi-ds.org/doilink/07.2025-99313242/UIJIR

therapy for cancer survivors, the referral of cancer survivors to physical therapy, the criteria relied upon, use of evidence based scales, and specification of restrictions inAn explanation of the study aim was written at the beginning of the questionnaire to obtain the consent of the participating oncologists before proceeding to the questions. All oncologists' subspecialties are potential physical therapy prescribers, and therefore, they were all included in this study. Sub-specialties include oncologic radiotherapy medicine, oncologic surgery, medical oncology, hematology and medical oncology, hematology, pediatric hematology and oncology, pediatric oncology and pediatric hematology.All oncologists received an email and/or an SMS explaining the study with a link to the electronic questionnaire. Those who did not respond after the first contact, received a second email and/or SMS as a reminder. A third and final email and/or SMS was sent to non-responders as a last call to answer the questionnaire. The total number of respondents was 45 responders, 58% of the total targeted population.Data was analyzed using the statistical software SPSS (Statistical Package for Social Sciences), version 21. A p-value <0.05 was considered significant with a confidence interval of 95%. Pearson's chi-square analysis was used to determine the association between the variables. Logistic regression was applied taking subspecialty as the dependent variable and several independent.

RESULTS

Regarding the socio-demographic information, as can be observed in table 1, the mean age was 43.4 ± 10.93, and majority was male (73.3%). Most respondents specialty was HematologyMedical (55.6%) and for the least were oncologic surgery (2.2%). The mean years of experience of responders was 12.98 years. Oncologists with less than 10 years of experience reached 53.3%, and only 6.7% had more than 30 years of experience. Most respondents practiced in Beirut (51.1%), followed by Baabda (15.6%).As for referral to physical therapy and with several choices overlapping as more than one answer was accepted, out of the

45 respondents, 44.44% confirmed that patients should be referred when the treatment starts, while 33.33% agreed that referral should be made when patient's condition improve during the treatment. Only, 17.78% considered that referral should occur when the treatment is over, and 15.56% consider referrals upon

need. Moreover, only13.33% considered that referrals to physical therapy should occur at time of diagnosis, and an equal percentage considered that referrals should never be prescribed .

DISCUSSION

The present study outlines the development and research evaluates the effectiveness of exercise interventions undertaken with people with cancer. Our study supports and updates the findings of

DOI Link :: https://doi-ds.org/doilink/07.2025-99313242/UIJIR

previous reviews and identified that exercise is of benefit to people with cancer. In the present study after review the literature it is found that physiotherapy reduce the complication after surgery in cancer patients and improve quality of life. Lauridsen et al. (2005) in their study concluded that physiotherapy improve the shoulder function significantly in patients treated surgically forbreast cancer. The effect of the treatment was influenced by the type of surgery performed, and in mastectomised patients, also by the application of radiation therapy . Beurskens CH et al. (2007) in his study showed that physiotherapy, which began two weeks after surgery, improved shoulder function and quality of life and reduced shoulder pain in patients with axillary dissection in breast cancer with substantial effect sizes. Handgrip strength showed a positive trend, however this was not markedly impaired postoperatively. The volume of the related arm showed little change with edema commonly occurring at a later stage after surgery. Significant improvement in the psychosocial situation was measured by the SIP. Fong DYT, et al. (2012) in his study also Reading into the data collected from the questionnaire in this

study, some ethical issues emerge and must be discussed, starting with referral to physical therapy. According to Hewitt and his colleagues, physical therapy should be present from the time a patient is diagnosed with cancer till the end of life [9]. Moreover, a study by Schwartz and her colleagues concluded that rehabilitation should be initiated at the moment of diagnosis to optimize the physical and psychological benefits, as well as, resilience to treatment [9]. Along the same lines, Kimmel and his colleagues mentioned in their research that in 2001 rehabilitation was mostly prescribed for end-stage cancer patients, but with the positive results obtained, referral to physical therapy is currently being set as early as possible for most patients . The result of our study revealed that this is not the practice followed in Lebanon. Only 6 out of the 45 (13.33%) oncologists prescribe physical therapy when the patient is diagnosed with cancer. The patients of 73.33% oncologists will be missing the benefits of physical therapy at this early stage, though they might be referred at a later stage. The remaining 13.33% of the oncologists who never refer their patients to physical therapy will be depriving patients from any benefit they can get at any stage, acting against the non-maleficence principle. This shows that most oncologists are not up-to date with the latest guidelines. Some are not aware of the benefits of physical therapy at all or prescribe it later than it should be, thus, decreasing or eliminating the beneficence they can providethe presence of any of the mentioned criteria should be a reason for referral to physical therapy if we are to follow international standards. According to Smith and Zheng, physical therapy should be prescribed to all patients with cancer because it can reduce the burden of symptoms and can help restore functions, joints range of motion, decrease fatigue and improve quality of life [10]. Campbell and his colleagues further highlight the fact that exercise is the best option to reduce cancer.

research findings highlight the lack of knowledge that oncologists might actually have about the multiple benefits of physical therapy for their patients.The use of validated assessment tools helps the

DOI Link :: https://doi-ds.org/doilink/07.2025-99313242/UIJIR

process of better decision-making through evaluating problem by utilizing the best scientific solutions available to date. Escalante and Manzullo recommend routine screening of patients for cancer-related fatigue and suggest a different approach for mild and moderate to severe intensity [11].

While 51.11% of oncologists mentioned using such tools for cancer-related fatigue assessment, 48.89% do not evaluate this problem, which could be leading to non-treatment, inappropriate treatment or out-of date treatment. This is against the beneficence and the non-maleficence principles [12].

When it comes to evaluating quality of life, 55.56% claimed using validated tools while 44.44% did not use such tools which ultimately leads to non-treating or offering an outdated treatment which also goes against the beneficence and the non-maleficence principles[13].

CONCLUSION

In this present study, by reviewing the literature it is found that specific strengthening exercises improve both function and quality of life in

cancer patients. Exercise plays a vital role in improving cardiopulmonary function, psychological events, muscular strength, and endurance in cancer patients. There are many evidences which show that C The concept of rehabilitation for cancer patients has been at the forefront of providing comprehensive care for over seventy years giving patients a chance to live a better life regardless of the status of the disease. Physical therapists can offer a wide range of solutions for cancer patients in order to improve their physical status and life. Nevertheless, this continues to be dependent on the referral of those patients from their oncologists as imposed by law. This study has shown that some ethical principles are not well respected in the oncology field, mainly those related to referral to physical therapy. As mentioned previously, beneficence is not always taken into consideration due to a lack or an out-ofdate knowledge and, unfortunately, this may lead to offering less benefits to patients. Moreover, undesirable events during rehabilitation could occur with certain cases which need the Physical therapy may have an important role to improve physical function, ADL, and QOL of cancer patients and cancer survivor.

REFRENCES

1. Sharma S. Current Burden of NonCommunicable Diseases in India. Journal of Nursing and Health Science. 2015; 4(5): page no 62-64 page.
2. Silver JK, Raj VS, Fu JB, Wisotzky EM, Smith SR, Kirch RA: Cancer rehabilitation and palliative care: critical components in the delivery of high-quality oncology services. Support Care Cancer 2015, 23(12):3633–3643.
3. Islam J, Harris GD. Cancer Survivor Health Needs for Women. Primary Care: Clinics in Office Practice. 2018; 45: 659-676.

DOI Link :: https://doi-ds.org/doilink/07.2025-99313242/UIJIR

4. Trotter K, Cohlmeyer S, Massa L. Gynecological Issues for Cancer Survivors. The Journal for Nurse Practitioners. 2018; 14: 283-288.
5. Smith SR, Khanna A, Wisotzky EM. An Evolving Role for Cancer Rehabilitation in the Era of Low-Dose Lung Computed Tomography Screening. PM&R. 2017; 9: S407-S414.
6. Singh F, Newton RU, Baker MK, Spry NA, Taaffe DR, Galvão DA. Feasibility and Efficacy of Presurgical Exercise in Survivors of Rectal Cancer Scheduled to Receive Curative Resection. Clinical Colorectal Cancer. 2017; 16: 358-365.
7. Ali I, Wani WA, Saleem K. Cancer Scenario in India with Future Perspectives Cancer Therapy. 2011; 8: 56–70p.
8. Hewitt ME, Greenfield S, Stovall E, National Cancer Policy Board (U.S.), eds. From Cancer Patient to Cancer Survivor: Lost in Transition. National Academies Press. 2006.
9. Smith SR, Zheng JY. The Intersection of Oncology Prognosis and Cancer Rehabilitation. Curr Phys Med Rehabil Rep. 2017; 5: 46-54.
10. . Escalante CP, Manzullo EF. Cancer-Related Fatigue: The Approach and Treatment. J Gen Intern Med. 2009; 24: 412-416.
11. Maltser S, Cristian A, Silver JK, Morris GS, Stout NL. A Focused Review of Safety Considerations in Cancer Rehabilitation. PM&R. 2017; 9: S415-S428.
12. Schwartz A. Initiating Exercise Interventions to Promote Wellness in Cancer Patients and Survivors. Published online 2019: 12.
13. Palliative care aims to improve the quality of life of patients who have serious or life-threatening diseases .

DOI Link :: https://doi-ds.org/doilink/07.2025-99313242/UIJIR