

# Awareness and Knowledge of Cancer Rehabilitation Among Medical Resident Doctors: A Cross-Sectional Study

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## ABSTRACT

**Introduction:** Cancer and its problems are on a rise. The role of physiotherapy in cancer is well established, but awareness among doctors and residents is not clear. The purpose of the study was to find the awareness and knowledge of physiotherapy and cancer rehabilitation among medical resident doctors.

**Methods:** A Google self-designed Questionnaire was generated, which was circulated via WhatsApp in different medical groups. The questionnaires took 5-10 minutes to complete. Descriptive analysis was done in Google spread sheet.

**Results:** 94.1% of the medical resident doctors reported that they are aware about physiotherapy. Only 54.1% of medical resident doctors were aware of cancer rehabilitation. Of them, 91.3% had knowledge about cancer physiotherapy. They had knowledge that the following symptoms could be improved by physiotherapy - range of motion (87%), pain (87%), decreased muscle strength and fatigue (80.4%) in post cancer patients and were unaware about role in weight loss, depression, reduced quality of life. 36.9% resident doctors were unaware about physiotherapy for lymphedema. 93.5% medical resident doctors knew that exercise therapy can be given, only 50% knew that electrotherapy may be given. 10.9% medical resident doctors are unaware about improved quality of life by physiotherapy treatment in cancer patients.

**Conclusion:** Awareness about physiotherapy and cancer rehabilitation among residents is

moderate. There is a need to educate medical resident doctors about fields of cancer rehabilitation or cancer physiotherapy, treatment and education programs.

**Keywords:** Awareness, cancer rehabilitation, knowledge, doctors

## INTRODUCTION

Cancer is a disease in which some of the body's cells grow uncontrollably and spread to other parts of the body. Cancer can start almost anywhere in the human body, which is made up of trillions of cells. Normally, human cells grow and multiply (through a process called cell division) to form new cells as the body needs them. When cells grow old or become damaged, they die, and new cells take their place. Sometimes this orderly process breaks down, and abnormal or damaged cells grow and multiply when they shouldn't. [1]

Cancer rehabilitation is care that focuses on maximizing a person's physical and emotional functioning with cancer, and can be started before, during, or after treatment. It is relatively new, many people are unaware that they could benefit from these therapies. Cancer rehabilitation includes a wide range of therapies that are designed to help a person maximize their functioning physically, emotionally, spiritually, socially, and financially. [2]

As of January 2019 there were 16.9 million cancer survivors in the United States, and this number is expected to grow substantially over the next decade [3] Now many cancer organizations consider cancer rehabilitation to be a crucial part of cancer care, including the National Comprehensive Cancer Network Clinical Practice Guidelines. Despite this, a 2018 study found that the majority of National Cancer Institute designated cancer centers (centers that stand out as being the leading institutions in the research on and treatment of cancer) did not provide survivors with information on cancer rehabilitation. [4] The goal of cancer rehabilitation is to maintain or restore physical, emotional, and sometimes spiritual functioning whether at home or the workplace. Some of the issues that may be addressed include like pain, fatigue, lymph edema, stiffness, cognition issues, neuropathy, depression etc. [5]

Physiotherapy as a profession has evolved over the years from general forms of physiotherapies to specialized physiotherapy services in healthcare settings. Despite the recognition and advances gained worldwide in physiotherapy, yet there are few researches done in India to evaluate the awareness and knowledge in cancer rehabilitation or cancer physiotherapy among resident doctors of India. Thus it is important to increase the awareness of the role of a physiotherapist among the medical residents which would be future clinical consultants, so that the work of physiotherapy can be enhanced and can be used widely with appropriate knowledge and concern.

Cancer and its problems are on a rise. The role of physiotherapy in cancer is well established, but the awareness for the same among doctors and residents is not clear. The present study aims to find the awareness and knowledge of physiotherapy and cancer rehabilitation or cancer physiotherapy among medical residents.

## **METHODOLOGY**

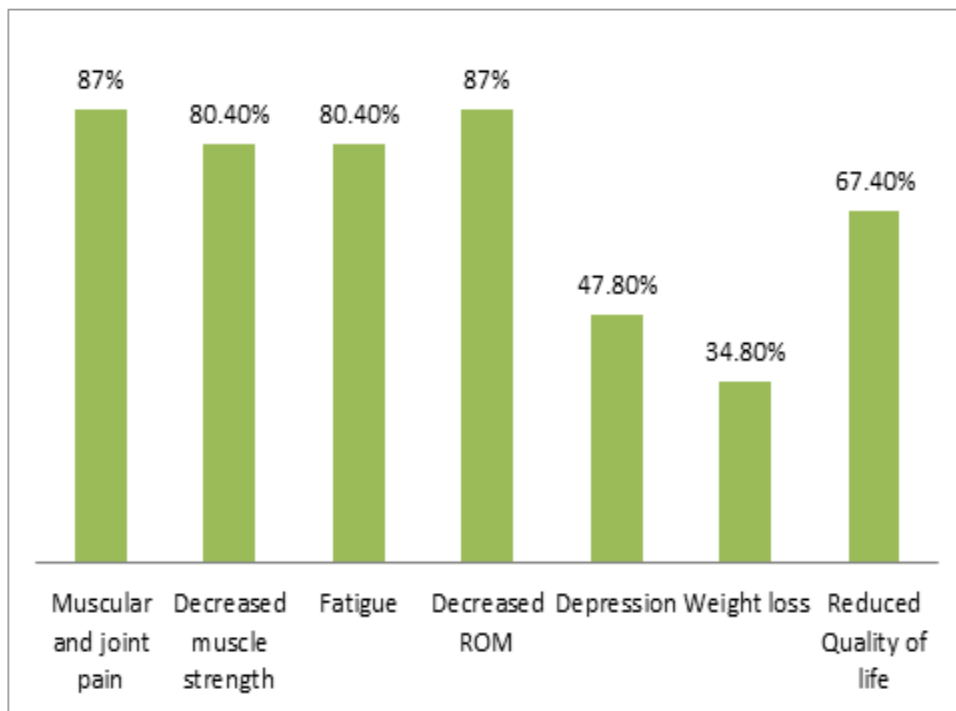
A descriptive study was conducted from July 2021 to August 2021. Eighty five medical resident doctors were selected by convenience sampling. A cross-sectional study was conducted using Google self-designed Questionnaire. Only medical resident doctors were included. Super-specialty in the medical field, dental, ayurved and homeopathic resident doctors were excluded. A Google self-designed Questionnaire was generated which was given to five physiotherapists who approved of the content of the questionnaire with few modifications. Questionnaire was given to five medical different resident doctors for addition, deletion or modification of questions before circulating. After final approval of the content of questions by authors, the questionnaires were circulated via what's app in different medical groups. Questionnaires comprised 3 sections; Part A, B and C. Part A: Subjective information, Part B: Awareness about physiotherapy, Part C: Knowledge about cancer physiotherapy. The questionnaires took 5-10 minutes to complete. Descriptive analysis was done in Microsoft excel. Statistical analysis was done using Microsoft excel 2007 and was represented in form of graphs.

## **RESULTS**

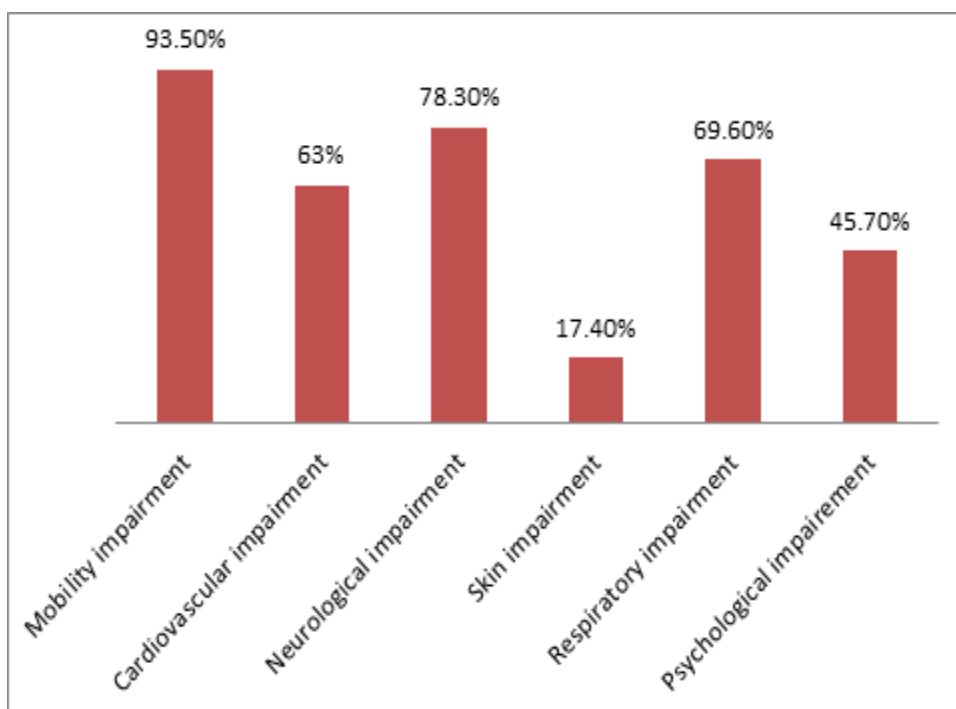
Eighty-five medical residents completed the study. 46 (54.1 %) were male and 39 (45.9%) were female. 80 (94.1%) out of 85 medical resident doctors reported they are aware about physiotherapy. Medical residents had highest awareness about musculoskeletal physiotherapy (91.8%) followed by sports (82.4%), neurology (82.4%) and cardio-respiratory (80%) while it was least about cancer, community health, woman's health, pediatrics and occupational health. According to medical residents, physiotherapists maximum work in hospital (88.2%), ICU (87.1%), clinics and OPD (76.5%) and least work in offices (11.80%), play ground (38.80%), community health centre (58.80%).

54% medical residents are aware about the cancer rehabilitation or cancer physiotherapy. 91.2 % (42) had knowledge what cancer rehabilitation and cancer physiotherapy did. Graph 1 shows the knowledge of medical residents about what physiotherapists treat regarding cancer and

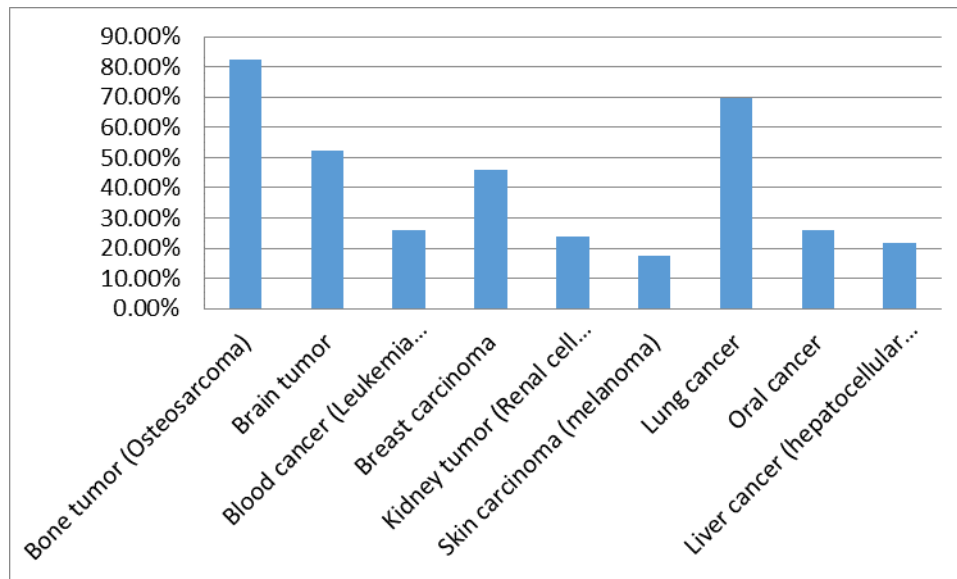
post cancer symptoms. Graph 2 shows knowledge in medical residents about different impairments treated by physiotherapy in cancer or post cancer patients. Graph 3 shows knowledge in medical residents about types of cancer where physiotherapy plays a role.



Graph 1: Knowledge of medical residents regarding the cancer and post cancer symptoms treated by physiotherapists



Graph 2: Knowledge in medical residents about different impairments treated by physiotherapy in cancer or post cancer patients



Graph 3: Knowledge in medical residents about types of cancer where physiotherapy plays a role

According to medical residents lymphedema reduces by physiotherapy was agreed by 63% whereas 33% were not so sure about the role of physiotherapy and 4% were not aware about physiotherapy. Whereas 65% medical residents had knowledge that exercise therapy was used in cancer and post cancer patients and only 35% were aware about electrotherapy used in cancer and post cancer patients. According to medical residents 89.1% cancer patients improve quality of life via physiotherapy but 10.90% confused about role of physiotherapy treatment.

## DISCUSSION

In present study 80 (94.1%) out of 85 medical resident doctors reported they are aware about physiotherapy. Contrary to present findings, Ebenezar CM concluded that there is lack of awareness and knowledge of physiotherapy among medical and health sciences undergraduates. [6]

In present study residents had highest knowledge about musculoskeletal physiotherapy (91.8%) followed by sports (82.4%), neurology (82.4%) and cardio-respiratory (80%) while least in cancer, community health, woman's health, pediatrics and occupational health. Abichandani D found same results as present study where residents had highest

knowledge about musculoskeletal physiotherapy (97.22%) followed by sports (93.80%), neuro (86.66%) and fitness (85%) while least in industrial therapy (66.10%) and community based rehabilitation (64.40%). [7]

In present study we found that 54% medical residents were aware about the cancer rehabilitation or cancer physiotherapy. We did not find any literature related to cancer physiotherapy or cancer rehabilitation in medical and paramedical profession. Abichandani D studied about knowledge about different fields like musculoskeletal, neurology, cardiopulmonary, sports, community health field. They concluded that physiotherapists should guide medical residents regarding physiotherapy and its various specialties, extensive knowledge of physiotherapy evaluation and management especially of community based rehabilitation and industrial health physiotherapy should be taught [7] but no study has been done about knowledge about cancer rehabilitation in doctors.

The present study found that 93.50% residents believed that physiotherapy works for mobility impairments, 78.30% for neurological impairments, 69.60% for respiratory impairments and 63% believed that physiotherapy works for cardiovascular impairments. 63% medical

residents were aware that lymphedema can be reduced by physiotherapy whereas 33% were not too sure and 4% were not aware about physiotherapy. Stubbelefield MD et al found that there are good data supporting the safety and efficacy of cancer rehabilitation in the treatment of many breast cancer-related impairments, including shoulder dysfunction and lymphedema, among others. Despite the goals and efficacy of cancer rehabilitation, there is a marked underuse of services. The reasons for this are many, but broadly result from a lack of knowledge about cancer rehabilitation on the part of patients and referring clinicians, limited access to services, and suboptimal adherence. [8]

In present study medical residents 89.1% cancer patients improve QOL via physiotherapy but 10.90% confused about physiotherapy treatment. Cuesta-Vargas AI et al suggest that a multimodal physiotherapy programmed improves general health and quality of life in breast cancer survivors. [9]

## CONCLUSION

Awareness about physiotherapy and cancer rehabilitation among residents is moderate. There is a need to educate medical resident doctors about fields of cancer rehabilitation or cancer physiotherapy, treatment and education programs.

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**Ethical Approval:** Approved

## REFERENCES

1. <https://www.cancer.gov/about-cancer/understanding/what-is-cancer>
2. <https://www.verywellhealth.com/cancer-rehabilitation-4580095>
3. Miller KD, Siegel RL, Lin CC, Mariotto AB et al. Cancer treatment and survivorship statistics, 2016. CA: a cancer journal for clinicians. 2016 Jul;66(4):271-89.
4. Silver JK, Raj VS, Fu JB, Wisotzky EM et al. Most National Cancer Institute-designated cancer center websites do not provide survivors with information about cancer rehabilitation services. Journal of Cancer Education. 2018 Oct;33(5):947-53.
5. <https://www.verywellhealth.com/cancer-rehabilitation-4580095#citation-3>
6. Ebenezer CM, Goh CX, Jemeela S et al. Awareness and Knowledge of Physiotherapy among Medical and Health Sciences Students: A Cross-Sectional Study. Research Journal of Pharmacy and Technology. 2019;12(4):1695-706.
7. Abichandani D, Radia V. Awareness of various aspects of physiotherapy among medical residents. J Int Med Res. 2015 Oct;4(10):1460-5.
8. Stubbelefield MD. The underutilization of rehabilitation to treat physical impairments in breast cancer survivors. Pm&r. 2017 Sep 1;9(9):S317-23.
9. Cuesta-Vargas AI, Buchan J, Arroyo-Morales M. A multimodal physiotherapy programme plus deep water running for improving cancer-related fatigue and quality of life in breast cancer survivors. European Journal of Cancer Care. 2014 Jan;23(1):15-21.

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