ISSN: 2415-038X (Print)

Journal of Preventive and Rehabilitative Medicine

2016; 1(3): 89-90
Published Online: 15/12/2016 (http://medicine.unza.zm/research/journal)
doi: 10.21617/jprm.2016.0101.16

# Translating Cancer Research into Evidence Based Practice: A Research Experience

## Commentary

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**To cite this article:**

Stephen R Samuel, Arun G Maiya, Donald J Fernandes. Translating Cancer Research into Evidence Based Practice: *A Research Experience*. *Journal of Preventive and Rehabilitative Medicine*, Vol. 1, No. 3, 2016, pp. 89-90. doi: 10.21617/jprm.2016.0101.16

## Introduction

This paper is intended to share our experience at the Department of Physiotherapy in the School of Allied Health Sciences and the department of Oncology and Radiotherapy, School Of Allied Health Sciences at Manipal University in India of how our research published in the Indian Journal of Medical Research has now translated into clinical decision making. In 2011 August, we set out on doing a clinical trial to test the feasibility and effectiveness of exercise based rehabilitation for head and neck cancer patients during chemo-radiotherapy. When we set out to do this trial, there were many challenges ahead of us as this was potentially the first ever Randomized Controlled Trial of an exercise intervention given to head and neck cancer patients on chemo-radiotherapy in India. Prior to the start of this trail, there was a growing body of evidence on the benefits of exercise for cancer populations like breast cancer and prostate cancer. Not many research groups had ventured into giving an exercise intervention to head and neck cancer patients as they have very debilitating symptoms like Oral Mucostis induced severe pain, severe fatigue and lack of nutrition which makes them a population difficult to exercise. Based on our clinical experiences and the past evidence from exercise based trials in breast cancer, we decided to take a step forward to do the first ever Randomized Controlled Trial (RCT) evaluating the effectiveness of exercise based rehabilitation for head and neck cancer patients receiving chemo-radiotherapy.

## The Team and the research Experience

Our team consisting of oncologists from Shirdi Sai Baba Hospital at Manipal and the physiotherapy team at the School Of Allied Health Sciences, Manipal University planned an exercise program that could be well tolerated by the patients on chemo-radiotherapy. We commenced the trial in February 2010 after obtaining approval from the Institutional Ethical Committee approval. The trial was completed in February 2011and the results of the trial were published in the March 2014 edition of the Indian Journal of Medical research after an elaborate peer review process

[1]. This trial found that exercise improved quality of life and functional capacity in head and neck cancer patient's receiving chemo-radiotherapy. A commentary on this clinical trial by Dr. Margaret L McNeely a renowned head and neck cancer rehabilitation specialist from the University of Alberta was published in the same edition of the Indian journal of medical research. Dr. McNeely commented that the exercise protocol and study outcomes used in the trial were feasible for clinical practice [2]. The publication has now been cited by 23 papers in various peer reviewed journals in the last 2 years.

## "American Cancer Society Head and Neck Cancer Survivorship Care Guidelines"

The American Cancer Society Head and Neck Cancer Survivorship Care Guidelines were developed by a multidisciplinary expert workgroup to enhance the care of head and neck cancer survivors. These guidelines were published in March 2016 in the Journal CA Cancer Journal for Clinicians [3]. Our study published in IJMR [1] is the only document from South-east Asia that has been cited by the guidelines. The guidelines have cited 4 exercise based studies in head and neck cancer, out of which our study is the only Randomized Controlled trail. This development is very encouraging as it speaks of how research can be translated into clinical practise. These guidelines will be a parameter clinicians across the globe who would be using these guidelines to plan treatment programs for patients with head and neck cancer.

## Why is this development Important?

The main focus of any clinical research is to benefit the patient through the outcome of the research. Head and neck cancer patients for long have been neglected in terms of exercise interventions due to lack of evidence. Although we had many challenges in carrying out this research we are glad that this research has now translated into evidence based practise by being cited and used by these guidelines. We hope this paper inspires the research fraternity in the physiotherapy community to achieve greater heights and see our research translate into global clinical practise.

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