Exercise in Rheumatoid arthritis patients

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Presented by

Amal Waguih Nassif

M.B., B.ch

Under the supervision of

Dr. Hala Abdel Monem Nassar

Assist Prof. of Rheumatology and Rehabilitation.

Faculty of Medicine-Cairo University

Dr. Zeinab Osman Nawito

Assist Prof. Of Rheumatology and Rehabilitation

Faculty of Medicine – Cairo University

Faculty of Medicine

Cairo University

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Title :

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Supervisor :

Dr. Hala Abd El-Monem Nassar

Assist. Prof. of Rheumatoloty & Rehabilitation

Faculty of Medicine – Cairo University

Co-Supervisor :

Dr. Zeinab Osman Nawito

Assist. Prof. of Rheumatoloty & Rehabilitation

Faculty of Medicine – Cairo University

Candidate :

Amal Waguih Nassif

M. B., B.ch Faculty of Medicine – Ein Shams University

Faculty of Medicine

Cairo University

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Abstract

Body fitness and judicious regimens of exercise prolongs life. R.A (rheumatoid arthritis) patients can benefit from exercise with no detrimental effect on disease activity or progression of joint damage.

Tai Chi which is a traditional Chinese martial art is a safe form of exercise in patients with R.A.

Patient's and physician's beliefs, attitudes & exercise discussions are all predictors of exercise behavior in R.A patients.

Evidence Based clinical practice guidelines (EBCPG) established the use of some therapeutic exercises for the management of R.A patients.

Key words : Body fitness – exercise – Tai Chi – predictors of behavior – EBCPG.

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Dedication

To all the people who ever helped me through out life every professor who taught me, every patient who helped me to learn.

To my parents, whose blessings and prayers have accompanied me every step on the road.

To my parents in low, whose support and enthusiasm I can never forget.

To my daughters, whose presence in my life has given me the courage to go on.

To my husband, without whom, I'd have never been able to go so for.

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Theory :

So far there has been a conflict about the role of exercise in R.A. Patients, as the management of active R.A was focused on best amount of immobilization & bed rest. However the approach to treating R.A. is changing.

Recently there has been great emphasis on the exercise component of physical therapy & how it can safely improve the physical fitness profile & even decrease the joint inflammation .

Rationale and Background

Introduction

Rheumatoid Arthritis (R.A) is a chronic inflammatory systemic disease with an incidence of 54 per 100.000 in women and 24.5 per 100.000 in men, as estimated in a British cohort of patients with early Arthritis **(Welsing et al., 2001)**.

Rheumatoid Arthritis encompasses a wide spectrum of features, from self limiting disease to progressively chronic disease with varying degrees of joint destruction **(ward et al., 1993)**

So far research on the management of R.A. was focused on the best amount of immobilization & bed rest. However the risks of bed rest and immobilization are well known such as loss of muscle strength & decline of cardio-respiratory function **(Van den Ende et al., 2000)**

As muscle weakness is common in patients with R.,A, Strength training is considered to be an important cornerstone of the nonpharmacological treatment **(Hakkinen, 2004)**

The approach to treating R.A is changing. Great emphasis on the exercise component of physical therapy can improve patients' muscle strength, endurance and emotional well being, and may even result in decreased joint inflammation **(Forrest Rymes, 1994)**

Recent findings showed that Moderate high intensity strength training has been effective & well tolerated methods to increase or maintain muscle strength in patients with R.A **(Hakkinen, 2004)**.

Both early & longstanding R.A patients with stable disease can safely improve the physical fitness profile using a progressive concurrent strength & endurance training protocol **(Hakkinen et al., 2003)**

The main conclusion drawn is that there is no evidence that patients with active disease should be restrained from exercising. On this basis it is suggested that patients with R.A should be encouraged to continue their exercise during active disease. **(Van Den Ende et al., 2000)**

Aim of Work

The aim of this study is to collect, concentrate and display the most recent strategies related to the role of exercise in patients with R.A.

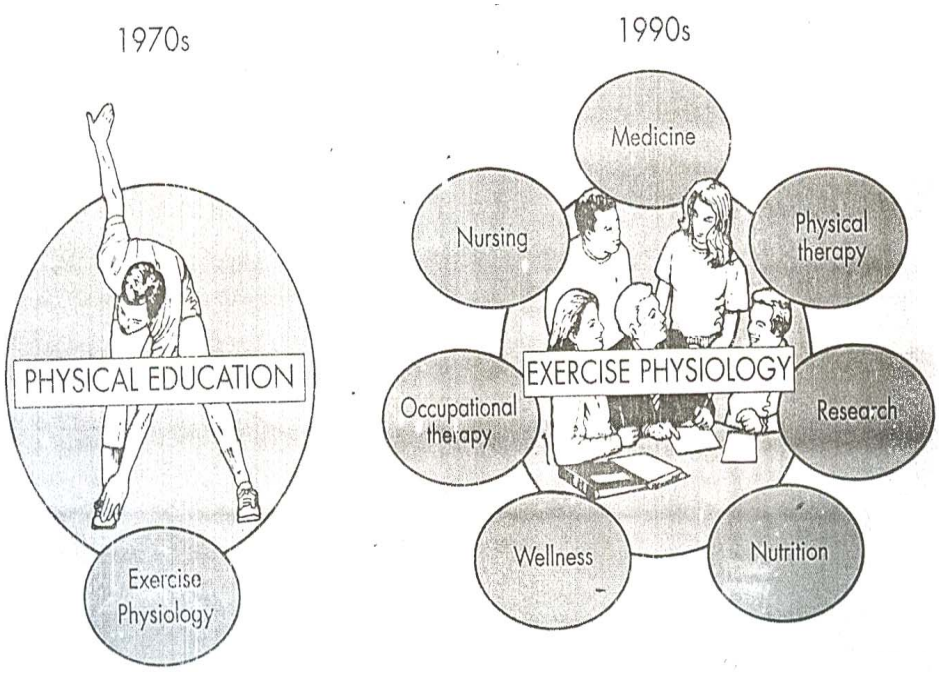
Methodology and Data :

Most recent published data is collected, revised, analyzed and presented as clearly, concisely & directly to the point as possible.

Chapter I

Physiology of Exercise

During the 1970s, exercise physiology was one of many core courses in physical education. Today the academic structure comprising exercise physiology courses must be suited to educating and training students from a diverse background for an equally diverse number of careers.



Employment, Physical education, Fitness consultant, Coaching.	Employment, Physical education, Academics, Research, Community fitness, Personal training. Corporate fitness, Clinical.

Figure 1. A. *Adapted from fundamental principles of exercise physiology for fitness, performance, and health By Roberts and Robergs, 2000.*

Physiology of exercise

Introduction and Definitions

Exercise & physical activity are daily parts of most people's lives . Medical related research now informs us that exercise is not only a recreational pursuit but also essential in the health & well being of our minds & bodies. **(Blair et al., 1992).**

The term **Exercise** can be used to denote activity that is performed for the purpose of improving, or maintaining or expressing a particular type of physical fitness. However the trend in today's developed societies is for a life style that is becoming less & less physically active , thereby , requiring more & more exercise to develop and maintain physical fitness. **(Williams & Wilkins Baltimore, 1995).**

physical fitness concerns being fit for physical activity . As there are many types of physical activities varying in each of muscles used, forces developed, and durations of use .There are also multiple forms of physical fitness , related to muscular strength, muscular power, muscular endurance, cardio respiratory endurance, flexibility , body composition and agility.(Figure 1B) **(Lee et al., 1995).**

Exercise can be performed in an organized manner for the development of specific components of physical fitness. The repeated use of exercise to improve physical fitness is termed