

## Effectiveness of Telemedicine Services Integrated Into Physiotherapeutic Health Care System

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### Abstract

To study was conducted to investigate the effectiveness of telemedicine system for the management of continually growing patient's physiotherapeutic needs while maintaining high quality care and services. The videoconferencing system, telephone, e-mail, videotapes and CDs, VAS were used in the study. Patients of back pain in the remote area were first asserted through videoconferencing. VAS was used to assess the severity of pain; muscle strength was assessed by MMT whereas functional assessment was judged by using Oswestry Disability Index. Treatment consisted of heat therapy, back exercises; ergonomic care was explained through videoconferencing. Reassessment was done after the completion of two weeks and then four weeks of treatment program. Significant improvement was found in relief of pain and improvement in muscle strength as well as functional ability. It was concluded that telemedicine can be used effectively for administering instant care and manage the increasing number of patient's input.

**Key Words:** Telemedicine, Videoconferencing, E-Mail, Oswestry Disability Index.

### Introduction

Change is the only constant in the world, or better said, advancement and evolution is imperative to any field of science and technology. Medical field too has been no exception. With the advent of telemedicine the dramatic changes have been taken place in health environment.

#### *Definition of telemedicine:*

The term telemedicine was first coined by Thomas Bud and later on it was redefined by Reid in 1996 as the use of advanced telecommunication technologies to exchange health information to provide healthcare services across geographic, time, social and cultural barriers (Sharma, 2005).

It may be as simple as two health professionals discussing a case over the telephone, or as sophisticated as using internet or satellite or videoconferencing

equipment in order to improve access to healthcare to sites that are at a distance from provider (Brown, 1996).

#### *A brief history of telemedicine:*

While the explosion of interest in telemedicine over the past four or five years makes it appear that it is a relatively new use of telecommunications technology, the truth is that telemedicine has been in use in some or other form from last about 40 years. The National Aeronautics and Space Administration (NASA) played an important role in the early development of telemedicine (Bashshur and Lovett, 1977).

Duration	Institution	Telemedicine Program
Early 1960s	NASA	Physiological parameters were telemetered from both the space craft and the space suits when humans began flying in