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## **PHYSIOTHERAPY IN SPORTS : AN EMPIRICAL STUDY AND ANALYSIS**

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### **Abstract**

The document explains how physiotherapy, in exercise and health promoters, are in an ideal position to influence the health of the individual. It also outlines how, as a result of the above, individual Member of Organizations are in a position to impact on the health of the global population through promotion of physical activity and advocacy in relation to public policy.

### **Introduction**

The importance of the role of physical activity in disease prevention and health promotion is well documented<sup>1</sup>. There are strong recommendations for the intensity and frequency of physical activity that everyone should aim to achieve throughout life to maintain health. Being active and keeping active are important whether one is young or old, able bodied or disabled, male or female. Physical activity and exercise not only maintain fitness, they also improve mental health [2].

Physiotherapists specialize in developing and maintaining people's ability to move and function throughout their lives. With an advanced understanding of how the body moves and what keeps it from moving well, physiotherapists promote wellness, mobility and independence. As exercise experts, especially in the treatment of long term and chronic conditions, physiotherapists provide services for a wide range of people to optimize their physical activity. They prescribe exercise as part of a structured, safe and effective programmed.

Physical inactivity is now identified as the fourth leading risk factor for global mortality. In many countries, levels of physical inactivity continue to rise having detrimental effects on the health status of the population [2]. The benefits of regular physical activity on primary and secondary prevention of several chronic diseases are well recognized and now widely established [3, 4]. These diseases account for nearly half of the overall global burden of disease. It is estimated currently that of every 10 deaths, 6 are attributable to non-communicable conditions [5]. Physical inactivity is estimated to be the main cause for approximately 21–25% of breast and colon cancers, 27% of diabetes and approximately 30% of ischemic heart disease burden<sup>5</sup>. In the '2008 Physical Activity Guidelines for Americans', authors reported strong evidence on the benefits of physical activity for lowering the risk of all cause mortality, coronary heart disease, stroke, hypertension, adverse blood lipid profiles, type 2 diabetes, metabolic syndrome, obesity, depression, colon cancer and breast cancer [2]. The authors also reported the positive relationship between physical activity and an improved cardiovascular and strength fitness and better cognitive function. These health benefits are seen in children, adolescents, adults, older adults, women and men, people of different races and ethnicities and people with disabilities and chronic conditions [2]. As a result of this overwhelming evidence for physical activity, over the last decade the focus of the scientific community has moved from finding correlations between physical activity and health status, to now identifying evidence for optimal doses [6,7,8]

### **Physiotherapy and Specialization:**

The "complexity and breadth" of the physiotherapy profession has grown beyond the scope of general practice (Bennett & Grant, 2004, p. 4). Continuing professional development is now

essential to ensure service quality and has become a professional responsibility (Donaghy & Gosling, 1999).

As the breadth and depth of knowledge and skills within the profession has increased, so have the opportunities for clinical and academic study post qualification. One physiotherapist cannot reach a great depth of knowledge and skill in the full breadth of clinical areas, so a graduate must be selective as their career progresses. Gradually, higher levels of skill and depth of knowledge are developed in a particular area. Sports physiotherapy is one such area.

### **Specialization in Sports Physiotherapy:**

Sports physiotherapy is now recognised as a specialist in many countries. Professional groups and associations have developed to represent their members, facilitate education and training, and ensure good practice (Donaghy & Gosling, 1999).

In 2000 the International Federation of Sports Physiotherapy was established to link the different national sports physiotherapy organizations (IFSP, 2000). Their mission statement is as follows:

“IFSP is a world-wide Federation, recognized as a subgroup of the World Confederation for Physical Therapy (WCPT), representing national organizations of Sports Physiotherapy. The efforts of the IFSP are directed towards Member Organizations and their individual members in serving athletes of all ages and abilities through excellence in education, research, practice, and clinical specialization. The intention of the IFSP is to be the International resource for Sports Physiotherapists, to promote Sports Physiotherapy through the International Olympic Committee (IOC); International Sports Federations (ISF's) and other professional organizations.”

Participation in sport often occurs within an international context, especially where athletes compete at high levels. For this reason, sports physiotherapy has an international dimension and their practice frequently requires them to travel with individual athletes and groups or teams. This means that being able to practice in different countries is important.

### **Definition and Description of the Sports Physiotherapist**

#### **Sports Physiotherapist: A Definition:**

A sports physiotherapist is a recognized professional who demonstrates advanced competencies in the promotion of safe physical activity participation, provision of advice, and adaptation of rehabilitation and training interventions, for the purposes of preventing injury, restoring optimal function, and contributing to the enhancement of sports performance, in athletes of all ages and abilities [1], while ensuring a high standard of professional and ethical practice.

#### **Sports Physiotherapist: A Description:**

Sports physiotherapists are professionals who aspire to work at master's level [2]. Sports physiotherapists work with athletes of all ages and abilities, at individual and group levels, to prevent injury, restore optimal function and contribute to the enhancement of sports performance, using sports-specific knowledge, skills and attitudes to achieve best clinical practice.

Sports physiotherapists are pioneers in their field, critically challenging and evaluating practice, developing new knowledge through research, and disseminating this understanding to initiate changes in practice.

In their role as a professional leader, sports physiotherapists influence their professional and multidisciplinary cultures by keeping up to date with new innovations, incorporating them into education, and creating a professional environment that enables the implementation of best practice. They aim to promote safe participation in physical activity, and the sports physiotherapy profession, to the wider community and facilitate international mobility of therapists through education and practice.

Sports Physiotherapists incorporate knowledge and understanding of innovations into the roles they play as advisors at several levels – as case managers (micro level), in service delivery (meso level), and in their influences on policy change (macro level).

At the heart of sports physiotherapists' thinking and behavior lies understanding of and sensitivity towards the implications of injury for the athlete and the impact on others around them. They maintain independence in their decision-making, ensuring their duty of care to the athlete in a context of many potential conflicts of interest.

### **Sports Physiotherapy Competencies and Standards**

The process of developing the competencies and standards has been described in section 2. Competencies have been written for sub-roles within the different roles. This has led to the development of eleven statements regarding the competencies expected of sports physiotherapists. Standards have been developed to supplement each competency description. These are specific behaviors that indicate the minimum level of achievement for each competency.

The first competencies and standards presented are those relating specifically to the overarching role: Manager of the Patient/Client. This role interlinks with the sports physiotherapist's activities as Advisor, Professional Leader, and Innovator; competencies falling into these three categories are presented next. Finally, competencies and standards are presented that relate to the overlaps between broad roles as Innovator, Professional Leader and Advisor.

Both competencies and standards incorporate flexibility for international variation. A space is provided within each competency and its related standards to allow any relevant statements regarding specific national interpretations.

### **Manager of the Patient/Client**

Sports physiotherapists are involved in the day-to-day management of their clients, involving a continuum of behaviors.

For the purposes of description, these behaviors are separated into four competencies. The first two are injury prevention and acute intervention. The third addresses the period between a physical activity or sport-related injury and the safe return to function, participation, and optimal performance in physical activity, exercise and sport. Lastly, performance enhancement describes a sports physiotherapist's contribution to the multidisciplinary team in relation to enhancing conditions for maximal performance.

1. Injury Prevention
2. Acute Intervention
3. Rehabilitation
4. Performance Enhancement

All these competencies involve evidence-based practice: the location, critical analysis, and synthesis of new information to allow judgments regarding the appropriate application of findings to practice.

1. Injury Prevention:

Sports physiotherapists assess the risks of injury associated with an athlete's participation in a specific sport or physical activity context; they inform and train athletes and other professionals in a way that reduces the occurrence and recurrence of injuries.

Standards Relating to Competency 1: Injury Prevention

- A. foundational knowledge
- B. critique and synthesis
- C. information collection
- D. information processing
- E. action / intervention
- F. evaluation and modification
- G. specific national standards

2. Acute Intervention:

Sports physiotherapists respond appropriately to acute injury or illness in both training and competition contexts, using prior communication with other professionals to identify and establish roles and responsibilities

3. Rehabilitation:

Sports physiotherapists use clinical reasoning and therapeutic skills to assess and diagnose sports-related injuries, and to design, implement, evaluate and modify evidence-based interventions that aim for a safe return to the athlete's optimal level of performance in their specific sport or physical activity.

4. Performance Enhancement:

Sports physiotherapists contribute to the enhancement of an athlete's performance by evaluating their physical and performance related profile and advising or intervening to optimize conditions for maximal performance in a specific sport, within a multidisciplinary team approach

5. Promotion of a Safe, Active Lifestyle:

Sports physiotherapists collaborate with other professionals to promote safe participation in sports and activity for individuals of all abilities; they provide evidence-based advice regarding the optimal activity or sport for specific individuals and the ways in which they can minimize risk of injury and promote health.

**Conclusion:**

This helps increasing the transparency of communication between sports physiotherapists and all individuals and agencies requiring their skills, guiding the design of professional development

opportunities, and enabling sports physiotherapists to provide evidence of their competencies and identify their learning needs.

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