



SPORTS MEDICINE

CONCEPT-AIMS-OBJ-NEED & SCOPE

BY
DR. PRABHAKER PANDEY
CSJMU
KANPUR

CONCEPT

- ▶ **Sports medicine** specializes in preventing, diagnosing and treating injuries related to participation in sports and/or exercise, specifically the rotation or deformation of joints or muscles caused by engaging in physical activities.

Concept (cont)

- ▶ Sports medicine has always been difficult to define because it is not a single specialty, but an area that involves health care professionals, researchers and educators from a wide variety of disciplines.
- ▶ Its function is not only curative and rehabilitative, but especially preventive.

Concept (cont)

- ▶ The sports medicine "team" includes specialty physicians and surgeons, athletic trainers, physical therapists, coaches, and other personnel, as well as the athlete himself/herself.
- ▶ Because of the competitive nature of sports, a primary focus of sports medicine is the rapid recovery of patients, which drives many innovations in the field.

Concept (cont)

- ▶ Despite this wide scope, there has been a tendency for many to assume that sport-related problems are by default musculoskeletal and that sports medicine is an orthopaedic specialty.

Concept (cont)

- ▶ There is much more in sports medicine than just musculoskeletal diagnosis and treatment.
- ▶ Illness or injury in sport can be caused by many factors – from environmental to physiological or psychological.

Concept (cont)

- ▶ Consequently, sports medicine can encompass an array of specialties, including cardiology, pulmonology, dermatology, ophthalmology, rehabilitation medicine, orthopaedic surgery, nutrition, podiatry, dentistry, exercise physiology, biomechanics, and traumatology.

Concept (cont)

- ▶ For example, heat, cold or altitude during training and competition can alter performance or may even be life threatening.
- ▶ The disorders of eating, menstrual disturbances, and bone density problems, and the problems of pregnancy or aging athletes demand knowledge from many diverse fields.

Concept (cont)

- ▶ In addition, the management of endocrinological diseases and other such problems in the athlete demands both medical expertise and sport-specific knowledge.
- ▶ The use of supplements, pharmacological or otherwise, and the topics of gender verification present complex moral, legal and health-related difficulties.

Concept (cont)

- ▶ Further unique problems are associated with international sporting events, such as the effects of travel and acclimatization, change in food and the attempt to balance an athlete's participation with his or her health.
- ▶ Much of this draws on new fields of study, in which extensive clinical and basic science research is required.

Sports Medicine Personnel

- ▶ The Sports Medicine specialist, either an orthopedist or a primary care sports medicine specialist, is usually the leader of the sports medicine team, which also includes physician and surgeon specialists.
- ▶ physiologists, athletic trainers, physical therapists, coaches, other personnel, and, of course, the athlete also comprise the sports medicine team.

Sp. Med. Personnel (Cont.)

- ▶ For primary care sports medicine, doctors wishing to specialize start with a primary residency program in family practice, internal medicine, emergency medicine, pediatrics or physical medicine and rehabilitation.
- ▶ Then, they generally obtain one to two years of additional training through accredited fellowship (subspecialty) programs in sports medicine.

Sp. Med. Personnel (Cont.)

- ▶ Physicians who are board certified in one of the preceding disciplines are then eligible to take a subspecialty qualification examination in sports medicine.
- ▶ Additional forums, which add to the expertise of a Sports Medicine Specialist, include continuing education in sports medicine, and membership and participation in sports medicine societies.

Sp. Med. Personnel (Cont.)

- ▶ Doctors specialized in orthopedic surgery may similarly subsequently add on a fellowship and subspecialty in orthopedic sports medicine.
- ▶ Sports medicine has been a recognized subspecialty of the American Board of Medical Specialties since 1989.
- ▶ Currently there are more than 70 sports medicine fellowships and approximately one thousand certified Sports Medicine Specialists in the United States.

AIMS OF SPORTS MEDICINE

- ▶ Sports Medicine has three major aims
 - ▶ Scientific promotion of sports and games
 - ▶ Prophylactic health care
 - ▶ Sports medical extension service

Scientific Promotion of Sports and Games

- ▶ Planning of training program
- ▶ Evaluation of training
- ▶ Selective diagnostic
- ▶ Psychological guidance and counselling
- ▶ Injuries prevention

Prophylactic Health care

- ▶ Functional evaluation
- ▶ Detection of disorders
- ▶ Maintenance of fitness
- ▶ Prevention of ageing
- ▶ Health education

Sports Medical Extension Services

- ▶ Treating Musculoskeletal and neurological problems
- ▶ Prevention of obesity
- ▶ Cardiac health
- ▶ Diabetes prevention and control

Opportunities

- ▶ Sports medicine has great scope. As sports get increasingly competitive, nothing short of 200% fitness can give the player the crucial winning edge.
- ▶ The opportunities are open as top-flight trainers, physiotherapists, nutritionists, psychologists and masseurs who keep the sportspersons fighting fit.

Scope of Sports Medicine

- ▶ Other than the prevention and treatment of sports related injuries the sports medicine also look after the following areas.
 - ▶ Problems related with women sports participation
 - ▶ Ageing and sports performance
 - ▶ Athletic nutrition
 - ▶ Fitness for sports and games

Scope (cont)

- ▶ Specific fitness
- ▶ Psychological aspect of sports performance
- ▶ Illness caused by environmental, physiological and psychological disturbance
- ▶ Medical supervision of athletes
- ▶ Adapted physical education
- ▶ Conditioning exercises

Scope (cont)

- ▶ Preventive and curative exercise
- ▶ Counseling for general health conscious people
- ▶ Use and abuse of drugs

Need of Sports Med

- ▶ Identification of proper sports talent with the help of medical tests
- ▶ Selection and rejection of team members on the basis of sports medical problems
- ▶ Helping in the preparation of training schedule

Need

- ▶ Prescribing the balance and special diet for people and sports men
- ▶ Suggesting coaches and trainers for modifying their training programme
- ▶ Educating the athlete regarding first aid of some common sports medical problems
- ▶ Educating the athlete regarding use and abuse of drugs and other medicines



▶ **THANK YOU**