



The role of pre-participation sports evaluation: A review

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Abstract

Background and Introduction:

- The purpose of the study is about create awareness for pre-participating evaluation, diversity of application, ethical standard maintenance, health promotion and evidence based practice.
- "Physiotherapists evaluate, plan and put into practice rehabilitative programs that improve or maximize movement ability, restore human motor functions, relieve pain syndromes, and care for or prevent physical challenges associated with injuries, diseases and other impairments. They apply a broad range of physical therapies and techniques such as movement, heating, ultrasound, laser and other techniques. They may build up and implement programmes for screening and prevention of general physical ailments and disorders".
- For prevention of more injuries and diminish the rate of sudden death.

Objective: The aim of this study is to cognize the role of Pre-participation sports evaluation as a health promoter, researcher, innovator, manager and physiotherapy-student.

Methodology: A. Data Source: Relevant articles were identified by searching from: PubMed, Science Direct, EBSCO, SCOPUS, Web of Science, shodhganga, Elsevier, Google Scholar.

B. Data Selection: Few significant scientific studies were found relating to the role of pre-participation sports evaluation. Five studies were selected based on inclusion criteria. Two pilot studies included as The Role of Pre-participation Assessment and Screening.

Results:

- The sports physical therapist is uniquely prepared to participate in the PPE process. Prevention of injury and performance enhancement is important, and PPEs can help make an impact on both areas.
- It focuses on prevention, evaluation, treatment, and rehabilitation and performance enhancement of the physically-active individual.

Conclusion: The well-designed and implemented PPEs will be welcome by the sports community and benefit everyone. Ensuring an athlete's safety can promote a lifelong health habit of physical activity in which the athlete can learn discipline, teamwork and physical fitness.

Keywords: pre-participation, physiotherapy, evaluation, sports, performance

Introduction

The Sports physical therapy is a unique practice area that in 1973 was with authorization recognized as a Section (special interest group) by the American Physical Therapy Association (APTA) House of Delegates.

The unique name, "The Sports Medicine Section" be changed in the 1980's to "The Sports Physical Therapy Section" in order to more precisely reflect the membership of the cluster. The Sports Physical Therapy Section (SPTS) defines sports physical therapy as a specialized put into practice that focuses on prevention, evaluation, treatment and rehabilitation and performance enhancement of the physically-active individual.

Sports participation and athletics can be a positive experience for all age groups – by boost fitness, pleasing to the eye self-esteem, enhancing coordination and providing an opportunity for creative teamwork and competition.

PPEs, preparticipation screenings, sports screenings, preparticipation medical evaluations, are all identical terms used to describe the process that sports participants should inclusive prior to participation in sports, training, and competition.

In a review of the literature on PPE, there is conformity that the PPE is *not* intended to substitute for athletes' regular health care needs but may make possible opportunities for general health care. Many objectives for the PPE have been identified; however, the main goal has always been to uphold the health and safety of athletes in training and competition, not to exclude them from competition.

Objective of PPE

- Determination of the general health of the athlete.
- Detection of conditions that may predispose the athlete to injury.
- Determination of optimum level of performance.
- Classification of the athlete according to individual qualifications.

- Improvement of fitness and performance.
- There is diminutive evidence that a screening PPE will identify any potential appalling or life threatening medical or musculoskeletal conditions.
- There are no standard protocols for the timing, frequency, or content of evaluations as the prevailing organizations, institutions, or available resources often guide these decisions. There are many additional factors that can impact the structure and performance of the PPE. There is conformity that the program should be specific to the population being assessed, and as comprehensive as possible with the available resources.
- PPE programs for athletes endow with a unique opportunity for the sports care team to provide information to the player, family, team physician, coaching staff, athletic trainers and others, that may be functional in preventing injury and enhancing performance.
- PPE examiners can take account of many members of the health care team – the MD or DO, the nurse practitioner, the physical therapist, the athletic trainer, dentist, exercise physiologist, and/or chiropractor.
- The eventual responsibility for recommendations should be that of the “team” physician in consultation with the opposite specialists. At the collegiate, professional, national, and international competition levels, the governing bodies will determine who may perform the PPE. Despite the consequences of the participants in the process, standardized forms and formats would benefit the athletes.
- The timing of the PPE should provide plenty time for the treatment or rehabilitation of any identified difficulty prior to participation and competition; thus the literature suggests that the PPE should be at least six weeks prior to the start of preseason practice.
- Screening labs and tests may be enormous additions to the PPE but are not custom to the PPE. Athletes with physical and mental disabilities endure the same PPE processes, except pathology-specific exams must be performed for medical eligibility.

Performance assessment tests determine

1. Endurance
2. Speed
3. Sustained speed
4. Power
5. Agility
6. Balance
7. Dynamic balance
8. Strength

- This clinical explanation has referred to sports definite evaluations several times. This is because each sport exhibits unique demands on different parts of the body and it is significant that components of PPEs consider this uniqueness.

The sports physical therapist is uniquely geared up to participate in the PPE process. The actual legal scope of practice of the sports physical therapist is delineated by the state licensure. Many states consent to the physical therapist to evaluate without a physician or other healthcare provider referral. Regardless of the area of expertise or training of the sports health care professionals involved in the PPE, they should not take the responsibility of conducting PPE lightly.

The PPE can be performed efficiently and thoroughly when protocols and tools are in place. Regardless of sport setting, the PPE provides the sports care team with an opportunity to complete a thorough examination given available resources.

The process can be time overwhelming, resource (human) intensive, but very valuable to the athlete, coach and sports care team. The literature does not identify data to support a specific approach or to establish the best practices for risk factor recognition.

The PPE will continue as a requirement and it is our challenge as healthcare providers to continue to improve the process. Best stated that we “still have a long way to go to perfect the PPE – both in content and in who should screen and evaluate the athlete for participation.” Prevention of injury and performance enrichment is important, and PPEs can help make an impact on both areas.

Ensuring an athlete's safety can uphold a lifelong health habit of physical activity in which the athlete can learn discipline, teamwork, physical fitness and solidarity.

Contraindications for Sports Participation

Active myocarditis or pericarditis

Acute enlargement of spleen or liver

History of recent concussion and symptoms of postconcussion syndrome

Hypertrophic cardiomyopathy

Eating disorder in which athlete is not compliant with therapy and follow-up, or when there is evidence of diminished performance or potential injury because of the eating disorder

Poorly controlled convulsive disorder

Materials and Methods

Study Design: Narrative Study/Literature Review

Source of Data: Cochrane literacy, Google scholar, SCOPUS, academia, Shodhganga, PubMed, Research Gate & Academia.

Results and Discussion

Management, decision-making and disposition of athletes the sports physical therapist is uniquely prepared to participate in the PPE process. Prevention of injury and performance enhancement is important, and PPEs can help make an impact on both areas.

It focuses on prevention, evaluation, treatment, and rehabilitation and performance enhancement of the physically-active individual.

Conclusion

The well-designed and implemented PPEs will be welcome by the sports community and benefit everyone. Ensuring an athlete's safety can promote a lifelong health habit of physical activity in which the athlete can learn discipline, teamwork and physical fitness.

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