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COMMITTEE FOR THE DEVELOPMENT OF SPORT

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"SPORT FOR ALL: SPORTS INJURIES AND THEIR PREVENTION"

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ORGANISED FOR THE CDDS BY THE MINISTRY OF WELFARE, HEALTH AND CULTURAL AFFAIRS AND THE NATIONAL INSTITUTE FOR SPORTS HEALTH CARE

EDITED VERSION OF THE RECOMMENDATIONS AND CONCLUSIONS ADOPTED BY THE PARTICIPANTS

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A. INTRODUCTION

1. The European Sport for All Charter, adopted by the Committee of Ministers in 1976, stresses the contribution which sport can make to people's need for physical activities for both their physical and their mental well-being and emphasises policies which seek to extend the benefits of sport.

2. The encouragement of sport for all programmes and policies during the last decade have had a significant impact on patterns of recreational behaviour in member States. They have in addition been beneficial by compensating for physical immobility, mental stress and other harmful aspects of 'modern' life.

3. The increase in participation in sport is evidence that these policies are achieving their objectives.

4. However, sport also has adverse effects. Injuries can occur through contact or carelessness or be self-inflicted through exertion or overuse.

5. This situation is unsatisfactory, not only for the injured sports participant but also for employers due to the costs of work absenteeism and the state because of the cost of sports injuries to the medical and health care system.

6. While there has been an advance in medical expertise and technology the problem of sports injuries warrants special examination by studying incidence and aetiology as building blocks for the development of successful prevention strategies.

7. In the co-ordinated research project "Sport for All: sports injuries and their prevention", launched as a result of the 4th Conference of European Ministers responsible for Sport (Malta, May 1984), researchers from a dozen European countries have worked in this field from 1985-1988.

8. The following conclusions and recommendations are based on the results of their studies and the discussions at the third and concluding seminar, 15-17 November 1988.

B. STATE OF THE ART

1. In the initial phase of the project participants joined forces to develop a common frame of reference with regard to objectives of the project and the methodology of sport injury research.

2. To be able to co-ordinate research and to compare findings, participants agreed upon the following definition: "A sport injury is that which occurs as a result of participation in sport and has one or more of the following consequences:

- a reduction in the amount or level of sports activity;
- a need for advice or treatment;
- adverse social or economic effects".

3. For valid interpretation of injury numbers one took as far as possible into account:

- correction for exposure time
- frequency and intensity of participation
- competition vs training
- age group and gender

4. Epidemiological investigations have been carried out in several member States in order to achieve a proper understanding of the nature and extent of sports injuries. The data for these reflect the social and cultural characteristics, and sports participation patterns in the member States.

5. These epidemiological studies throw the injuries problem into starker relief. The total number of injuries has been greatly underestimated. New data reveal social, economical and medical characteristics of sports injuries.

6. In sports injury research relatively much attention has been paid to the medically treated sports injury (eg nature, diagnosis, localisation and seriousness). These studies are mainly based on records of medical institutions eg GPs, emergency wards and specialists).

7. Due to the popularity of soccer the highest number of injuries is sustained during football matches or training.

8. There is also evidence that the injury risk in team-contact sports, with soccer in the first place, is relatively high.

9. In most sports the injury risk during matches and competition is much higher than during training sessions.

10. Despite the absence of reliable figures it has been estimated that a considerable amount of injuries are sustained while practising unorganised sports (eg jogging and skiing) or activities not supervised by coaches.

11. The aetiology of sports injuries, as shown by several studies, depends mainly on the specific characteristics of each type of sport, the factors relevant for all sports or group of sports seem to be limited.

12. Athletes with a history of injury or chronic disease are at higher risk (of recurrence) of injury.

13. Some countries have started in-depth studies using experimental and control groups to reveal the injury mechanism and to validate effective preventive measures (eg soccer, jogging).

14. Based on a great deal of epidemiological information already gathered, some member States have taken action to prevent sports injuries by means of media campaigns, education of coaches and physical educators, and information leaflets.

C. LACKING KNOWLEDGE

1. Basic information on the overall injury situation has been compiled in various ways. Because of the objectives of such systems (eg insurance, health) specific information is still lacking. This is certainly the case for valid data on participation and exposure time.

2. Various studies have paid attention to the background and circumstances of the medically treated sports injury. More attention should be devoted to the number and nature of less serious injuries which do not receive attention from a general practitioner or medical specialist and to the registration of fatal sports accidents.

3. Most of the epidemiological studies have concentrated on extrinsic and intrinsic risk factors from a medical point of view. Little is known about the behavioural risk factors. More research into personality profile, stress-coping ability and sensation seeking is needed.

4. Although many in-depth studies have been executed in several sports, there is still a need for more studies to examine the specific risk factors in other sports (eg basketball).

5. The analysis of over-use injuries raised questions about the relationship between physical exercise, health and well-being. More detailed research into the minimum and maximum level of physical exercise with respect to health is necessary.

6. Recently, promotion and education campaigns have been introduced to prevent sports injury, yet little is known about the effect of different prevention measures, either singly or together.

D. RECOMMENDATIONS

D.1 PREVENTION

1. It is recommended to set up a national committee which is responsible for a coherent approach towards sports injury prevention and safety promotion.

2. Sports promotion campaigns should encourage more and safer sport participation in order to optimise physical, mental and social effects.

3. It is recommended, if sufficient data are available on the specific risk factors from which preventive measures can be deduced, to prepare information campaigns on sports injury prevention.

4. Expensive preventive methods and important measures should be evaluated on a small scale before being implemented in nationwide campaigns.

5. It is recommended to co-ordinate information campaigns properly as different messages from different sources can minimise the final effects.

6. As (primary) prevention of sports injury is not always feasible, attention should also focus on early diagnosis and adequate first aid (secondary prevention) and on effective medical treatment and rehabilitation (tertiary prevention).

D.2 RESEARCH

1. Several CDDS countries have carried out epidemiological investigations in order to achieve a better understanding of the injury phenomenon. It is advisable to undertake similar studies in other countries.

2. Nationwide surveys or registration of sports injuries can also establish or monitor the effects of prevention policies.

3. Sufficient research should deal with the large amount of 'minor injuries', since even these injuries interfere with the 'sport for all' principle and can have serious effects for competitive athletes.

4. More attention should be paid to the causes of fatal injuries and the injuries with permanent disability. A register of fatal sports accidents should be kept in every country.

5. In health research more attention should be paid to the effect of exercise on the structure and fucntion of the organs and systems in the human body (eg cardiovascular, hormonal, immunological, gastro-intestinal).

6. It is necessary to establish the value of pre-participation examination as an instrument for a prevention policy.

7. It is recommended to evaluate scientifically different medical treatments on outcome and period of sick-leave and sport-absenteeism.

D.3 SPORT (CON)FEDERATIONS

1. Each national and international sports organisation should consider it a basic responsibility to adapt the regulations on facilities and equipment, the rules and the refereeing in order to reduce the amount and severity of sports injuries.

2. As behavioural determinants can have a great influence on injury incidence, sports organisations should pay more attention to 'fair play' and good sportsmanship.

3. The training of coaches needs to be improved with regard to injury prevention during training and also in matches. Coaches should recognise that safety and prevention of injuries are part of their responsibility.

D.4 GOVERNMENT

1. The training of physical education teachers needs to be improved with regard to injury prevention and health promotion.

2. It is a responsibility for the sports industry and government to develop standards in relation to materials and products which contribute to safety in sports. Protective equipment must be comfortable to wear and easy to apply.

3. Adequate knowledge of the practice of sport and the principles of physical training are an important element in preventing sports injury. Therefore health education in schools should also deal with these subjects.