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Is it possible to prevent the development of eating disorders in sports?

Submission date
22/01/2013

Recruitment status
No longer recruiting

Registration date
05/02/2013

Overall study status
Completed

Last Edited
05/02/2013

Condition category
Mental and Behavioural Disorders

[ ] Prospectively registered
[ ] Protocol
[ ] Statistical analysis plan
[ ] Results
[ ] Individual participant data
[ ] Record updated in last year

Plain English summary of protocol

Background and study aims
The prevalence of eating disorders (ED) is higher among elite athletes than non-athletes, particularly among athletes competing in weight-sensitive sports, and higher in female than male athletes.
Concerning the physical and psychosocial complications related to eating disorders and the use of extreme weight regulation methods, it is strongly desirable to prevent eating disorders in sport. At present, no studies concerning prevention of eating disorders among elite athletes have been performed and strategies to prevent eating disorders are lacking
Thus the aims of this study are to examine the effect of a one-year multi-component intervention program on the development of ED and symptoms associated with ED among adolescent female and male elite athletes.
The results of this long-term intervention project will reveal important knowledge on how to prevent eating disorders among athletes.

Who can participate?
The sample is the total population of first grade students starting in the fall 2008 at Elite Sport High Schools in Norway. There are sixteen schools containing 711 athletes and 194 coaches attending the project. The Norwegian Elite Sport High Schools are private and public high schools with programs designed for talented athletes.

What does this study involve?
The schools were randomly allocated to the intervention or control group. All athletes from each school were randomized to the same treatment arm (intervention or control).
The project consists of two parts:
1. The survey involved both athletes and coaches, and took place during the fall 2008. In pre- and post tests the surveys included both standardized tests and own developed questions, and a clinical interview with the athletes.
2. The intervention included lectures and exercises in different areas which are considered important in the preventing eating disorders. The intervention started in the spring in 2009 and was completed in May 2010.

What are the possible benefits and risks of participating?
Possible benefits for the athletes attending the intervention are increased knowledge and optimized eating behavior and self-esteem. Reduced risk of developing an ED.
Athletes with an ED regardless of whether they are in the intervention or control will be guided on how they make contact on the system for supervision / treatment.
Possible benefits for the coaches are increased knowledge about nutrition, body composition, weight issues, ED, mental training, self-esteem and self-confidence, as well as how to identify and manage disordered eating and ED problems among athletes.
By taking part of this study there are no risks of physical injury or harm. However, by focusing on topics such as sport nutrition, growth and development, there may be a risk of increasing the prevalence of symptoms associated with ED.

Where is the study run from?
The study took part at the different Elite Sport High Schools during school-hour.

When is the study starting and how long is it expected to run for?
The study started in 2008 when athletes born in 1992 were 1-year students at high school. The study ended when the participants ended high school (June 2011).

Who is funding the study?
Oslo Sport Trauma Research Center. The center has been established through generous grants from the Royal Norwegian Ministry of Culture, the South-Eastern Norway Regional Health Authority, the International Olympic Committee, the Norwegian Olympic Committee & Confederation of Sport, and the Norsk Tipping AS. This project has been supported by a generous grant from Olympiatoppen.

Who is the main contact?
Marianne Martinsen
marianne.martinsen@nih.no

Contact information

Type(s)
Scientific

Contact name
Mrs Marianne Martinsen

Contact details
Oslo Sport Trauma Research Center
Norwegian School of Sport Sciences
P.O. Box 4014
Ullevaal Stadion
Oslo
Norway
0806
+47 23 26 22 64
marianne.martinsen@nih.no

Additional identifiers

Study information

Scientific Title
Preventing eating disorders in sports: A cluster randomised controlled trial

Study objectives
The prevalence of eating disorders is higher among elite athletes than non-athletes, particularly among athletes competing in weight-sensitive sports. Adolescence is a high risk period of developing eating disorders.

The main objective of the study was to examine the effect of a one-year multi-component intervention program on the development of eating disorders and symptoms associated with eating disorders among adolescent female and male elite athletes.

Study hypothesis:
1. The intervention will prevent new cases of eating disorders among female and male athletes attending the intervention.
2. The intervention will reduce the percentage of reported symptoms associated with eating disorders among the athletes attending the intervention compared to the athletes attending the control schools.

Ethics approval required
Old ethics approval format

Ethics approval(s)
The National Committees for Research Ethics, 17th September 2008 , ref:S-08442d. 1008/10620

Primary study design
Interventional

Study design
Cluster randomised controlled trial

Study type(s)
Prevention

Health condition(s) or problem(s) studied
Clinical eating disorders

Interventions
This is a cluster randomised controlled trial, where the 16 Elite Sport High Schools were cluster randomised to intervention (n = 9) and control (n=7).

The intervention was a one-year multi-component intervention program, aiming to prevent the development of eating disorders and symptoms associated with eating disorders (ED).

The intervention program was organized as lectures, teamwork exercises, and practical and theoretical assignments (during the lectures and as homework). The lectures consisted of four

90-minutes sessions conducted at school during school hours by the research group. In addition, our communication with the athletes was based on e-mail, a closed Facebook group and different electronic communication tools used by the school the athletes attended.

Intervention Type
Other

Phase
Not Applicable

Primary outcome(s)
Fulfilling the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) criteria for Anorexia Nervosa, Bulimia Nervosa or Eating Disorders Not Otherwise Specified.
Eating disorders were determined by using the clinical interview Eating Disorder Examination (EDE). The clinical interview was conducted after questionnaire screening, at pretest and at post test 2 (1-year follow-up).

Key secondary outcome(s)
Symptoms associated with ED assessed at baseline, after the intervention (posttest 1) and posttest 2 (9-month follow-up) based on the self-reported questionnaire.

Completion date
01/07/2011

Eligibility

Key inclusion criteria
1. 1-year students attending one of the Elite Sport High School in Norway (born in 1992)
2. Coaches working with the 1-year students at one of the Elite Sport High Schools in Norway

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Child

Sex
All

Key exclusion criteria
1. 1-year students not born in 1992
2. Not received written consent to participate from the athletes and or their parents.

Date of first enrolment
01/10/2008

Date of final enrolment

01/07/2011

Locations

Countries of recruitment
Norway

Study participating centre
Oslo Sport Trauma Research Center
Oslo
Norway
0806

Sponsor information

Organisation
Oslo Sports Trauma Research Center (Norway)

ROR
https://ror.org/018ct3570

Funder(s)

Funder type
Research organisation

Funder Name
Oslo Sport Trauma Research Center (Norway) - The center has been established through generous grants from the Royal Norwegian Ministry of Culture, the South-Eastern Norway Regional Health Authority, the International Olympic Committee, the Norwegian Olympic Committee & Confederation of Sport, and the Norsk Tipping AS. This project has been supported by a generous grant from Olympiatoppen.

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Study website	Study website	11/11/2025	11/11/2025	No	Yes