

**Methods:** We included studies in which participants with DS from every age group received treadmill training, alone or combined with physiotherapy and could optionally be compared to a control group with patients with DS who did not use treadmill training. The search was conducted in medical databases: PubMed, PEDro, Science Direct, Scopus and Web of Science and involved trials published until July 2021. Following PRISMA criteria, the Risk of Bias assessment was conducted using a tool developed by the Cochrane Collaboration for RCT. The included studies presented multiple outcomes and various methodologies therefore we were not able to conduct any sort of data synthesis, we presented measures of treatment effect as mean differences and corresponding 95% confidence intervals.

**Results:** 5 studies with a total number of 687 participants were included. 10 trials reported on walking onset, 8 on gait parameters or cardiovascular functions, 4 on anti-inflammatory effect and 3 on executive or cognitive functions. We came across 25 different outcomes in different age groups which are presented in a narrative manner. In all outcomes we have observed a positive result favouring the treadmill training.

**Conclusions:** Introducing treadmill exercise into typical physiotherapy generates improvements of mental and physical health of people with DS of all ages.

**Disclosure:** No significant relationships.

**Keywords:** treadmill training; intellectual disability; Down syndrome

## Eating Disorders 02

### EPP0819

#### Association of Eating Disorders with Recurrent Pain in Adolescent Girls

N. Semenova<sup>1\*</sup>, H. Slobodskaya<sup>2</sup> and E. Rezun<sup>2</sup>

<sup>1</sup>Scientific Research Institute of Medical Problems of the North, Department Of Child's Physical And Mental Health, Krasnoyarsk, Russian Federation and <sup>2</sup>Federal State Budgetary Scientific Institution «Scientific Research Institute of Neurosciences and Medicine», Department Of Child Development And Individual Differences, Novosibirsk, Russian Federation

\*Corresponding author.

doi: 10.1192/j.eurpsy.2022.971

**Introduction:** Eating disorders (ED) are associated with other mental illnesses, but the association of ED with pain is less well understood.

**Objectives:** To study the association of ED with headache and abdominal pain in adolescent girls.

**Methods:** In 2015-2018, 917 girls aged 12-17 were examined using the Body Image and Eating Distress scale (Koskelainen et al., 2001) and questions about frequency of recurrent headache and abdominal pain over the past six months. Adolescents were divided into three groups: girls with eating disorders (ED, n = 20); subthreshold eating disorders (SED, n = 88); and a control group (CG, n = 809).

**Results:** Headaches of varying frequency were reported by 80% of girls with ED, 70.4% of girls with SED and 52.2% of CG girls. Frequent headaches (every week) were reported by 60% of girls with

ED, 40.9% of girls with SED, and 29.9% of CG girls ( $\chi^2 = 20.21$ ,  $p = 0.003$ ). Recurrent abdominal pain was reported by 65% of girls with ED, 56.8% of girls with SED, and by 46.6% of CG girls. Weekly abdominal pain affected 30% of girls with ED, 20.4% of girls with SED and 12.9% of CG girls. Combined weekly pain were commoner in girls with eating distress (in 20% of girls with ED and in 12.5% with SED) than in CG (7.7%,  $\chi^2 = 3.92$ ,  $p = 0.04$ ).

**Conclusions:** Eating disorders in adolescents are often associated with pain, which can lead to late recognition of the disease, worsening its course and prognosis.

**Disclosure:** The study was supported by the Russian Science Foundation grant # 21-15-00033

**Keywords:** Adolescents; recurrent pain; Eating Disorders; girls

### EPP0820

#### Suicidal Behavior in Adolescent Girls with Eating Disorders

N. Semenova<sup>1\*</sup>, H. Slobodskaya<sup>2</sup> and E. Rezun<sup>2</sup>

<sup>1</sup>Scientific Research Institute of Medical Problems of the North, Department Of Child's Physical And Mental Health, Krasnoyarsk, Russian Federation and <sup>2</sup>Federal State Budgetary Scientific Institution «Scientific Research Institute of Neurosciences and Medicine», Department Of Child Development And Individual Differences, Novosibirsk, Russian Federation

\*Corresponding author.

doi: 10.1192/j.eurpsy.2022.972

**Introduction:** Eating disorders are associated with suicidal behavior in adolescents. But the relationship between subthreshold eating disorders and suicidality is not well understood.

**Objectives:** To examine suicidal behavior in adolescent girls with eating disorders (ED) and subthreshold eating disorders (SED).

**Methods:** The study of 917 girls aged 12-17 used the Body Image and Eating Distress scale (Koskelainen et al., 2001) and questions about intentional self-harm (burns or cuts), suicidal thoughts and suicidal attempts. Adolescents were divided into three groups: girls with ED (n = 20); girls with SED (n = 88); and control group (CG, n = 809).

**Results:** Self-harm was reported by 55% of girls with ED, 35.2% of girls with SED and 20.2% of CG girls ( $\chi^2 = 15.82$ ,  $p < 0.001$ ). Suicidal ideation was reported by 65% of girls with ED, 51.1% of girls with SED and 27.2% of CG girls ( $\chi^2 = 21.86$ ,  $p < 0.001$ ). Suicidal attempts were reported by 45% of girls with ED, 17.1% of girls with SED and 7.5% of the CG. There were no differences in the prevalence of self-harm and suicidal ideation between the ED and SED groups, rates of suicide attempts were 2.6 times higher in the ED group.

**Conclusions:** Girls with both ED and SED have a high risk of suicidal behavior: 2.7-4.5 times higher rates of self-harm, 1.9-2.4 times higher rates of suicidal ideation, and 2.3-6 times higher rates of suicidal attempts. Management of such adolescents should include assessment of the risk of suicide.

**Disclosure:** The study was supported by the Russian Science Foundation grant # 21-15-00033.

**Keywords:** Eating Disorders; girls; Suicide; Adolescents