Meta analysis of Exercise Intervention on Dyslipidemia in recent 6 years

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Objective  To investigate and evaluate the evidence of exercise intervention in dyslipidemia, this study aims to make a systematic evaluation of exercise intervention in recent 6 years and a summary evaluation of meta analysis.

Methods  The electronic database was searched including CNKI, Wanfang. The Chinese key words, dyslipidemia, exercise, physical activity, acute exercise, aerobic exercise, exercise training, etc., were collected from various databases from January 2013 to July 2018. After extracting the data, RevMan 5.3 software was used to analyze the merging effect.

Results  2066 subjects were included in 17 articles, 1026 in the experimental group and 1040 in the control group. The results showed that: (1) Total cholesterol (TC) SMD = -0.74 (95% CI: -1.07 to -0.41, P < 0.00001); (2) Triglyceride (TG) SMD = -0.98 (95% CI: -1.39 to -0.56, P < 0.00001); (3) Low density lipoprotein cholesterol (LDL-C) SMD = -1.06 (95% CI: -1.63 to -0.50, P < 0.00001); (4) High density lipoprotein cholesterol (HDL-C) SMD = 0.66 (95% CI: 0.39 to 0.93, P < 0.00001).

Conclusions  Exercise intervention can effectively reduce the plasma TG, LDL-C concentration and increase the plasma HDL-C concentration.