2018-10

Parkrun, activity and health: The public health potential of parkrun

Stevinson, C

http://hdl.handle.net/10026.1/12653

All content in PEARL is protected by copyright law. Author manuscripts are made available in accordance with publisher policies. Please cite only the published version using the details provided on the item record or document. In the absence of an open licence (e.g. Creative Commons), permissions for further reuse of content should be sought from the publisher or author.
Public health outcomes of parkrun: a prospective 12-month study

Clare Stevinson¹,², Mary Hickson³

¹School of Sport, Exercise and Health Sciences, Loughborough University, United Kingdom; ²National Centre of Sport & Exercise Medicine East Midlands; ³Institute of Health and Community, University of Plymouth, United Kingdom

BACKGROUND

Mass participation sports events are recognised as a way of engaging low active individuals in health-enhancing physical activity. One example of a mass participation event that takes place on a frequent basis is parkrun: a global network of free weekly 5km run/walks in outdoor public spaces. Cross-sectional studies have identified perceived health and wellbeing benefits of parkrun participation⁴, but there is a need to assess sustained behaviour and health outcomes.

AIM

To examine changes in self-reported physical activity, body mass index, and psychological wellbeing over 12 months among participants of parkrun.

METHODS

DESIGN: Prospective cohort study with a 12 month follow up.

SAMPLE: 354 new adult registrants of a UK parkrun.

MEASURES: Self-reported measures of physical activity (International Physical Activity Questionnaire short form⁵), weight and height, happiness (Short Depression and Happiness Scale⁶), and stress (Perceived Stress Scale⁷), were completed at registration, 6 months and 12 months. Objective data on attendance and fitness (i.e. run dates and finishing times) for the 12-month study period were obtained from the parkrun database.

RESULTS

CHANGES IN SELF-REPORTED OUTCOMES

Physical activity increased by 76.9 min/w at 6 months and 39.4 min/w at 12 months. For the low active sub-group (n = 31) the increase at 12 months was 194.2 min/w.

Body mass index decreased with a relative weight loss of 1.1% at 12 months.

Happiness increases and stress reductions at 6 months were maintained at 12 months.

CONCLUSIONS

Small significant positive changes were recorded in physical activity, body mass index, fitness, and wellbeing outcomes for the overall sample, with greater gains for those who were inactive, overweight, or depressed at baseline. Based on the principle that significant public health benefit can be achieved through small changes for many people, or large improvements for fewer individuals, parkrun appears to have considerable potential impact on population health.

REFERENCES

Public health outcomes of parkrun: a prospective 12-month study

Clare Stevinson1,2, Mary Hickson3
1School of Sport, Exercise and Health Sciences, Loughborough University, United Kingdom; 2National Centre of Sport & Exercise Medicine East Midlands; 3Institute of Health and Community, University of Plymouth, United Kingdom

BACKGROUND
Mass participation sports events are recognised as a way of engaging low active individuals in health-enhancing physical activity.

One example of a mass participation event that takes place on a frequent basis is parkrun: a global network of free weekly 5km run/walks in outdoor public spaces. Cross-sectional studies have identified perceived health and wellbeing benefits of parkrun participation1–4, but there is a need to assess sustained behaviour and health outcomes.

AIM
To examine changes in self-reported physical activity, body mass index, and psychological wellbeing over 12 months among participants of parkrun.

METHODS

DESIGN: Prospective cohort study with a 12 month follow up.

SAMPLE: 354 new adult registrants of a UK parkrun.

MEASURES: Self-reported measures of physical activity (International Physical Activity Questionnaire short form5), weight and height, happiness (Short Depression and Happiness Scale6), and stress (Perceived Stress Scale7), were completed at registration, 6 months and 12 months.

Objective data on attendance and fitness (i.e. run dates and finishing times) for the 12-month study period were obtained from the parkrun database.

DATA ANALYSIS: Analysis of variance (ANOVA) was used to assess changes in self-reported outcomes between baseline, 6-months and 12-months. Linear regression was used to identify predictors of fitness change over 12 months.

ETHICAL APPROVAL: Approval was granted by the Loughborough University Ethics Approvals (Human Participants) sub-committee.

RESULTS

Age: 41.4 ± 10.9 years
Sex: 55.9% female; 44.1% male
Runner status: 44.1 regular runners; 24.3% occasional runners; 31.6% non-runners
Weight status: 61% normal overweight; 30.5% overweight; 8.5% obese

CHANGES IN SELF-REPORTED OUTCOMES

Physical activity increased by 76.9 min/w at 6 months and 39.4 min/w at 12 months. For the low active sub-group (n = 31) the increase at 12 months was 154.2 min/w.

Body mass index decreased with a relative weight loss of 1.1% at 12 months.

Physical activity increased by 76.9 min/w at 6 months and 39.4 min/w at 12 months.

Happiness and stress reductions at 6 months were maintained at 12 months.

CONCLUSIONS
Small significant positive changes were recorded in physical activity, body mass index, fitness, and wellbeing outcomes for the overall sample, with greater gains for those who were inactive, overweight, or depressed at baseline.

Based on the principle that significant public health benefit can be achieved through small changes for many people, or large improvements for fewer individuals, parkrun appears to have considerable potential impact on population health.

REFERENCES

AUTHOR CONTACTS
c.d.stevinson@lboro.ac.uk; mary.hickson@plymouth.ac.uk