ISRCTN67201841 https://doi.org/10.1186/ISRCTN67201841

Implementation and evaluation of a community-based health-promoting school intervention - Fit lifestyle at school and at home: the FLASH study

Submission date
06/05/2019

Recruitment status
No longer recruiting

Registration date
09/05/2019

Overall study status
Completed

Last Edited
23/08/2022

Condition category
Other

[_] Prospectively registered
[X] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol
Background and study aims
A community-based approach can be a promising strategy for implementing school-based health promotion aimed at stimulating healthy physical activity and dietary behavior. Such an approach builds on the community capacity of multiple stakeholders, empowering them to design and implement tailored activities, supported by the whole school community. The FLASH intervention includes four strategies for building community capacity of students, school personnel and parents:
1) identifying leaders in each stakeholder group
2) stimulating a school culture of participation
3) having stakeholders design and implement tailored activities
4) creating a network of local partners for structural embedding.
The objective of the study is to monitor capacity-building processes of the FLASH intervention and to explore if these processes contribute to changes in community capacity. In addition, we will explore if the FLASH intervention is related to changes in PA, dietary behaviors and BMI of students.

Who can participate?
Students at schools offering prevocational education (lowest education level in the Netherlands) can take part in this study.

What does the study involve?
1) Semi-structured interviews are carried out with different stakeholders (school personnel and parents).
2) Based on photo-elicitation methodology, students are enabled to show what engages, supports and challenges them with regard to choices they make in the healthy school community regarding dietary and physical activity behavior.
3) Students are asked to fill in a questionnaire and their length, weight and waist circumference are measured.

What are the possible benefits and risks of participating?
Possible benefits include a healthier school community, with a healthier school environment. In addition, benefits could also be positive changes in physical activity and dietary behaviors for students. There are no risks of participating in the study.

Where is the study run from?
Vrije Universiteit Amsterdam department of Health Sciences, the Netherlands

When is the study starting and how long is it expected to run for?
September 2016 to February 2019

Who is funding the study?
The Netherlands Organisation for Health Research and Development (ZonMw)

Who is the main contact?
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Contact information

Type(s)
Scientific

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Additional identifiers

Clinical Trials Information System (CTIS)
Nil known

ClinicalTrials.gov (NCT)
Nil known

Protocol serial number
50-53105-98-033

Study information

Scientific Title
Creating healthy school communities by sound teamwork

Acronym
FLASH

Study objectives
It is hypothesized that on the short term, the FLASH intervention will lead to changes in student attitudes towards physical activity (PA) and dietary behavior. On the intermediate term, this will lead to changes in PA and dietary behaviors and on the long-term to changes in BMI and waist-circumference.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 20/09/2016, Medical Ethics Committee of the VU Medical Centre (Postbus 7057, 1007 MB Amsterdam, The Netherlands; +31 20 444 4444; metc@vumc.nl), ref: 2016.352

Study design
Evaluation study quasi-experimental design

Primary study design
Interventional

Study type(s)
Prevention

Health condition(s) or problem(s) studied
Healthy lifestyles

Interventions
Mapping the situation - needs-assessment:
The FLASH intervention starts with a needs-assessment among a) students and b) key-stakeholders. For students, the needs-assessment is based on photo-elicitation methodology where students are enabled to show what engages, supports and challenges them with regard to choices they make in the healthy school community regarding dietary and PA behavior. Key stakeholders among school personnel and parents are interviewed to identify conditions and strengths in the school community and opportunities for capacity-building within their specific context.

Facilitating community-capacity building:
Several inputs are provided to each school community to facilitate four capacity-building strategies.
- Identifying and appointing leaders: a healthy school coordinator is appointed and is allocated time to create a network of motivated initiators. These coordinators are coached and guided by experts from local organizations
- Creating a school culture of participation: the healthy school coordinator is seen as a starting point. Coaching from experts is focused on small steps and experiences of success. The schools are provide with methods suitable for participation based on evidence.
- Designing and implementing activities: conducting and analyzing the needs-assessment to serve as input. The coordinator will organize a design-thinking session with representatives of all stakeholders to create ideas and solutions. An implementation budget is provided as a start-up recourse

- Creating a network of local support: coaching and guidance are provided by experts from local organizations in different areas (education and public health).
- Coaching from these experts is aimed towards building potential collaboration using their local network based on the needs of the community.

The intervention follows an action-oriented approach where we monitor processes of community-capacity building, the implementation of activities and the influence of contextual factors on these processes in real-life settings. Observed results are used to achieve continuous improvement of processes within capacity-building strategies.

Intervention Type
Behavioural

Primary outcome(s)
1. Changes in community-capacity evaluated with the community readiness to change interview method, which includes an anchoring scoring system that can create a score for each community on their level of community-capacity. Interviews take place at the end of school year 2017/18 (June 2018) and at one-year follow-up, June 2019.
2. Changes in health-promotion activities evaluated per intervention school on how they fit within the pillars of the Dutch Healthy-School approach: education, policy, environment and monitoring. A questionnaire is filled out by the healthy school-coordinator at baseline and three-year follow-up.
3. Daily processes related to capacity-building monitored with journals of the healthy school coordinator, with document analysis of meetings held throughout the intervention and with interviews with key stakeholders from local organizations (such as local public health organization, educational organization, municipality). Measurements take place every 26 weeks during the intervention.

Key secondary outcome(s))
1. PA and dietary behaviors including attitude toward PA and dietary behavior, are measured with a self-reported questionnaire.
2. BMI and waist circumference. Height and weight are measured to calculate BMI. Height, weight, and waist circumference are all measured using a protocol by trained research assistants.

Data are gathered in three cohorts between October and December on a yearly basis starting in 2016. Participants are followed-up on until they leave school or when the study will be concluded (January 2019). Students start in the study when they are in the second grade. In prevocational education, students are intended to leave school after the fourth grade. This leads to the following measurements per cohort:
- Cohort 1 is measured at three time points: in school year 2016/17 (measurement 1), school year 2017/18 (measurement 2) and school year 2018/19 (measurement 3).
- Cohort 2 is measured at three time points: in school year 2017/18 (measurement 1), school year 2018/19 (measurement 2) and school year 2019/20 (measurement 3).
- Cohort 3 is measured at two time points: in school year 2018/19 (measurement 1) and school year 2019/20 (measurement 2).

Completion date
31/01/2020

Eligibility

Key inclusion criteria
All schools:
1. School offers prevocational education (lowest education level in the Netherlands)
2. School is committed to participate in evaluation research for four years

Inclusion criteria for intervention schools:
1. Willing to implement the FLASH intervention, e.g. create a healthy school community regarding health PA and dietary behavior
2. Willing to facilitate new health-promotion activities
3. Willing to appoint a staff member to coordinate the intervention

Inclusion criteria for control schools:
1. Control schools match on the following characteristics to an intervention school: size (total number of prevocational students registered), physical environment (rural vs. urban environment), types of education offered (school offers exclusively prevocational education vs. schools offer prevocational education and higher types of secondary education)

Individual level:
1. All students enrolled in prevocational education
2. Informed consent from student and parent

Participant type(s)
Healthy volunteer

Healthy volunteers allowed
No

Age group
Child

Sex
All

Key exclusion criteria
For control schools:
1. Schools that fall under the direction of the educational organization that co-developed the FLASH intervention. This organization facilitates secondary and vocational education in the North-eastern region of the Netherlands. Therefore, schools in this region are excluded for control schools to prevent contamination of results due to connection between these schools and the educational organization.

Date of first enrolment
01/09/2016

Date of final enrolment
01/02/2019

Locations

Countries of recruitment

Netherlands

Study participating centre
Vrije Universiteit Amsterdam department of Health Sciences
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Sponsor information

Organisation
Vrije Universiteit Amsterdam

ROR
https://ror.org/008xxew50

Funder(s)

Funder type
Research organisation

Funder Name
ZonMw

Alternative Name(s)
Netherlands Organisation for Health Research and Development

Funding Body Type
Private sector organisation

Funding Body Subtype
Other non-profit organizations

Location
Netherlands

Results and Publications

Individual participant data (IPD) sharing plan

The current data sharing plans for this study are unknown and will be available at a later date

IPD sharing plan summary

Data sharing statement to be made available at a later date

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		03/08/2022	23/08/2022	Yes	No
Protocol article	protocol	20/06/2019	09/12/2020	Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes
Study website	Study website	11/11/2025	11/11/2025	No	Yes