Is dietary consultation an effective intervention to improve health-related behavior and oral health in adults with severe caries disease?

Submission date	Recruitment status	Prospectively registered
11/08/2023	No longer recruiting	<pre>Protocol</pre>
Registration date	Overall study status	Statistical analysis plan
15/08/2023	Completed	Results
Last Edited	Condition category	Individual participant data
14/08/2024	Oral Health	[X] Record updated in last year

Plain English summary of protocol

Background and study aims:

Dietary factors (mainly sugars) play a crucial role for the development of caries disease. There is a need to develop more effective methods to change oral health behaviors, as conventional counseling methods are not always effective. The aim of the project is, by means of a Randomized Controlled Trial, to evaluate dietary counselling provided by a dietician, in dentistry. Can this preventive health promotive treatment change health behaviors (e.g. decreased sugar consumption) so that the risk for caries will decrease over time?

Who can participate:

Young adults (18-30 years) with caries disease (two or more manifested proximal dental caries lesions) and good understanding of Swedish.

What does the study involve:

Participants are randomly allocated to an intervention or control group. Both groups receive standardised oral health information, provided verbally by a registered dental hygienist using a brochure on oral health behaviour and caries. Those in the intervention group also receive manual-based dietary counselling provided by a licensed dietician, two individual sessions at the dental clinic and one booster session on telephone.

What are the possible benefits and risks of participating:

The participants may benefit from improved oral health. Whilst the intervention is assessed for adverse effects, no specific risks for the participants are expected.

Where is the study run from:

The Institute of odontology, The Sahlgrenska academy, University of Gothenburg, Sweden.

When is the study starting and how long is it expected to run for: September 2015 to June 2022

Who is funding the study:

The Health Care Subcommittee, Region Västra Götaland, Sweden.

Who is the main contact:

Ulla Wide, licensed psychologist, professor ulla.wide@gu.se

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

EudraCT/CTIS number

Nil known

IRAS number

ClinicalTrials.gov number

Nil known

Secondary identifying numbers

Nil known

Study information

Scientific Title

Is a manual-based dietary intervention more effective to improve health-related behavior and particularly dietary habits, in young adults with severe dental caries disease, compared to standard information? A randomized controlled trial

Study objectives

A manual-based dietary intervention improves health-related behavoir, particularly dietary habits, significantly more than standard information alone

Ethics approval required

Ethics approval required

Ethics approval(s)

Approved 22/04/2016, Swedish Ethical Review Authority (Box 2110, Uppsala, 75002, Sweden; +46 10 475 08 00; registrator@etikprovning.se), ref: 185-16

Study design

Interventional randomized controlled trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Dental clinic

Study type(s)

Treatment

Participant information sheet

Not available in web format, please use the contact details to request a patient information sheet.

Health condition(s) or problem(s) studied

Poor oral health, dental caries lesions

Interventions

Participants are randomly allocated to an intervention or control group.

Both groups receive standardised oral health information, provided verbally by a registered dental hygienist using a brochure on oral health behavior and caries.

Those in the intervention group also receive a manual-based dietary intervention (two individual sessions at the clinic, one telephone booster session), provided by a licensed dietician.

Duration of the intervention: two individual sessions (50 min each), one booster session (30 min).

The follow-up for each arm: 6 weeks, 18 weeks, and 1 year for both study arms.

Randomisation process: The randomisation was performed via a block randomisation process, and sealed envelopes.

Intervention Type

Behavioural

Primary outcome measure

1. Dietary intake and meal patterns measured using the 59-item Food Frequency Questionnaire, at baseline and 6 weeks, 18 weeks and 1 year

2. Sugar consumption measured using a self-report questionnaire (items for consumption of soft drinks and candy/sweets) at baseline and 6 weeks, 18 weeks and 1 year

Secondary outcome measures

- 1. Self-rated oral health measured with a single question, at baseline and 6 weeks, 18 weeks and 1 year
- 2. Oral health-related quality of life measured with OHIP-5 (Oral health impact profile) at baseline and 6 weeks, 18 weeks and 1 year
- 3. Health locus of control and self-efficacy, measured with Health locus of control scale and General self-efficacy scale, at baseline and 6 weeks, 18 weeks and 1 year
- 4. Oral health behavior measured by a self-report questionnaire at baseline and 6 weeks, 18 weeks and 1 year
- 5. Psychological distress measured by EQ5D5L at baseline, 18 weeks and 1 year

Overall study start date

01/09/2015

Completion date

30/06/2022

Eligibility

Key inclusion criteria

- 1. Aged 18-30 years
- 2. ≥2 manifest proximal dental caries lesions
- 3. Good understanding of Swedish

Participant type(s)

Patient

Age group

Adult

Lower age limit

18 Years

Upper age limit

30 Years

Sex

Both

Target number of participants

90

Total final enrolment

74

Key exclusion criteria

Psychiatric/neuropsychiatric diagnosis, such as depression, psychosis, autism spectrum disorder, mental retardation, substance abuse.

Date of first enrolment

01/04/2019

Date of final enrolment

24/05/2021

Locations

Countries of recruitment

Sweden

Study participating centre Public dental service clinic Vänersborg, Region Västra Götaland

Kronogatan 14 Vänersborg Sweden 46230

Sponsor information

Organisation

University of Gothenburg

Sponsor details

Box 100 Gothenburg Sweden 405 30 +46 31 786 0000 info@sahlgrenska.gu.se

Sponsor type

University/education

Website

http://www.gu.se/english

ROR

https://ror.org/01tm6cn81

Funder(s)

Funder type

Government

Funder Name

The Health Care Subcommittee, Region Västra Götaland, Sweden

Results and Publications

Publication and dissemination plan

Several publications in scientific peer-reviewed journals are planned with the coming years.

Intention to publish date

31/12/2024

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are/will be available upon request from Professor Ulla Wide at ulla.wide@gu.se

IPD sharing plan summary

Available on request