

# Can messages based on behavioral economics increase participation in colorectal cancer screening programmes?

<b>Submission date</b> 28/05/2021	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 17/06/2021	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 12/04/2022	<b>Condition category</b> Cancer	<input checked="" type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

While colorectal cancer (CRC) screening can detect cancer at an early stage, participation in CRC screening programmes is often below recommended levels. In order to be effective, CRC screening programs high participation. There is therefore an interest in studying possible interventions to achieve high participation. While interventions such as pre-notification letters, tailored reminder letters and telephone contact can increase participation, they are often too costly for the screening programmes. Interventions based on behavioural economics only manipulate the decision setting and are therefore potentially cost-neutral. The aim of this study is to test whether messages derived from behavioral economics can increase participation in the context of the Cypriot pilot program for colorectal cancer screening.

### Who can participate?

All residents aged 50-69 years who are eligible for colorectal cancer screening.

### What does the study involve?

In the first study participants are randomly allocated to receive the standard invitation letter with one of six additional behavioral economics-based messages included, or the standard invitation letter with no manipulation. The additional behavioural economics-based messages are built on the following principles: (1) social responsibility to look after own health, (2) anticipated regret of non-attendance, (3) financial opportunity costs of non-attendance, (4) benefit of early detection, (5) limited duration of the offer and (6) social norms. In the second study participants are randomly allocated to receive either the standard invitation letter with the most effective message from the first study, or the standard invitation letter with no manipulation.

### What are the possible benefits and risks of participating?

This study presents participants with an invitation for CRC screening. Cancer can often evoke mild anxiety in people. The invitation letter clearly outlined the topic which allowed participants

to decide whether they want to participate in the screening programme. In terms of benefit, the participants will help to test invitation material that will hopefully increase participation rates. This would speed up the diagnostic pathway of CRC as well as have financial implications.

When is the study running?  
February 2013 to March 2015

Who is funding the study?  
1. The Ministry of Health (Cyprus)  
2. European Commission

Who is the main contact?  
Sandro Stoffel  
sandro.stoffel@unibas.ch

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Dr Sandro Stoffel

**ORCID ID**  
<http://orcid.org/0000-0002-0124-0941>

**Contact details**  
Klingelbergstrasse 61  
Basel  
Switzerland  
4056  
+41 (0)792190931  
sandro.stoffel@unibas.ch

## Additional identifiers

**EudraCT/CTIS number**  
Nil known

**IRAS number**

**ClinicalTrials.gov number**  
Nil known

**Secondary identifying numbers**  
BET2013CYP

## Study information

**Scientific Title**

Testing messages from behavioral economics to improve participation in the Cypriot colorectal cancer screening program in two field experiments

### **Study objectives**

Messages derived from behavioral economics can increase participation in colorectal cancer screening.

### **Ethics approval required**

Old ethics approval format

### **Ethics approval(s)**

Approved 14/9/2013, ethics committee of the Cyprus Ministry of Health (National Bioethics Committee of Cyprus, Laertou 22, 2365 Agios Dometios, Nicosia, Cyprus; +357 (0)22809038 /+357 (0)22809039; cnbc@bioethics.gov.cy), ref: not applicable

### **Study design**

Two interventional single-blinded randomized controlled trials

### **Primary study design**

Interventional

### **Secondary study design**

Randomised controlled trial

### **Study setting(s)**

Home

### **Study type(s)**

Screening

### **Participant information sheet**

No participant information sheet available

### **Health condition(s) or problem(s) studied**

Colorectal cancer

### **Interventions**

The intervention consists of adding an additional paragraph, containing a message based on behavioural economics, in the invitation letter for colorectal cancer screening.

The researchers perform two randomized controlled trials (RCTs). The first RCT is a seven-arm RCT in which individuals are randomly allocated to receive the standard invitation letter with one of six additional behavioral economics-based messages included, or the standard invitation letter with no manipulation (i.e. control). The additional behavioural economics-based messages are built on the following principles: (1) social responsibility to look after own health, (2) anticipated regret of non-attendance, (3) financial opportunity costs of non-attendance, (4) benefit of early detection, (5) limited duration of the offer and (6) social norms.

The second RCT is a two-arm RCT, in which individuals are randomly allocated to receive either the standard invitation letter with the most efficacious message from the first RCT, or the standard invitation letter with no manipulation (i.e. control). The primary aim of the first RCT is

to identify the most efficacious message, which is then tested in the second RCT with more participants per trial arm.

**Intervention Type**

Behavioural

**Primary outcome measure**

Participation (i.e. return of a completed FIT kit) measured 8 weeks after sending out the screening invitation

**Secondary outcome measures**

There are no secondary outcome measures

**Overall study start date**

01/02/2013

**Completion date**

31/03/2015

**Eligibility****Key inclusion criteria**

Men and women aged 50 to 69 years

**Participant type(s)**

All

**Age group**

Adult

**Sex**

Both

**Target number of participants**

6500

**Total final enrolment**

6286

**Key exclusion criteria**

Not resident in Cyprus

**Date of first enrolment**

01/10/2013

**Date of final enrolment**

31/12/2014

**Locations**

**Countries of recruitment**

Cyprus

**Study participating centre**

Ministry of Health

Prodromou 1

Nicosia

Cyprus

1148

## Sponsor information

**Organisation**

Joint Research Center

**Sponsor details**

Via Enrico Fermi 2749

Ispira

Italy

21027

+38 (0)635020401

benedikt.herrmann@ec.europa.eu

**Sponsor type**

Government

**Website**

[https://ec.europa.eu/info/departments/joint-research-centre\\_en](https://ec.europa.eu/info/departments/joint-research-centre_en)

**ROR**

<https://ror.org/05a4nj078>

## Funder(s)

**Funder type**

Government

**Funder Name**

Ministry of Health (Cyprus)

**Funder Name**

European Commission

**Alternative Name(s)**

European Union, Comisión Europea, Europäische Kommission, EU-Kommissionen, Euroopa Komisjoni, Ευρωπαϊκή Επιτροπή, Европейская комиссия, Evropské komise, Commission européenne, Choimisiúin Eorpaigh, Evropskoj komisiji, Commissione europea, La Commissione europea, Eiropas Komisiju, Europos Komisijos, Európai Bizottságrol, Europese Commissie, Komisja Europejska, Comissão Europeia, Comisia Europeană, Európskej komisii, Evropski komisiji, Euroopan komission, Europeiska kommissionen, EC, EU

**Funding Body Type**

Government organisation

**Funding Body Subtype**

National government

**Location**

## Results and Publications

**Publication and dissemination plan**

Planned publication in a high-impact peer-reviewed journal. Additional documents are not available.

**Intention to publish date**

01/07/2021

**Individual participant data (IPD) sharing plan**

Anonymous data will be stored in a repository and made available for all researchers at <https://osf.io/wx7je/>.

**IPD sharing plan summary**

Stored in publicly available repository

**Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Dataset</a>		30/01/2020	12/04/2022	No	No
<a href="#">Results article</a>		28/07/2021	12/04/2022	Yes	No