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Question behavior effect and influenza vaccination behaviour in health professionals

Submission date	Recruitment status	[ ] Prospectively registered
17/03/2016	No longer recruiting	[ ] Protocol
Registration date	**Overall study status**	[ ] Statistical analysis plan
22/03/2016	Completed	[ ] Results
Last Edited	**Condition category**	[ ] Individual participant data
27/04/2018	Respiratory	[ ] Record updated in last year

Plain English summary of protocol
Background and study aims
Asking questions about a behaviour can change that behaviour – called the Question Behaviour Effect (QBE). The aim of this study is to test the effectiveness of interventions based on the QBE at promoting influenza vaccination in health professionals. We will also examine the potential importance of past behaviour as a moderator in QBE studies.

Who can participate?
All staff at a teaching hospital in the UK

What does the study involve?
Hospital staff are invited to visit a website. Those visiting the website provide their personal details, job details and socio-demographic measures (gender, age, marital status, ethnicity, number of children). Participants are randomly allocated to one of three groups. Participants in the control group do not complete any further questions. Participants in the standard questionnaire group complete questions about anticipated regret, intentions and attitudes in relation to influenza vaccination. Participants in the standard + beneficence questionnaire group complete questions about anticipated regret, benefits, intentions and attitudes in relation to influenza vaccination. We used vaccination records to assess whether they received influenza vaccination during 2010-11 (past behavior) and 2011-12 (future behavior).

What are the possible benefits and risks of participating?
Participating will help us to develop ways to increase vaccination rates. There are no risks.

Where is the study run from?
University of Leeds (UK)

When is the study starting and how long is it expected to run for?
October 2011 to March 2012

Who is funding the study?
Economic and Social Research Council (UK)

Who is the main contact?
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Contact information

Type(s)
Scientific

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers
N/A

Study information

Scientific Title
A randomized controlled trial of the question-behavior effect: moderating effects of past influenza vaccination behavior

Study objectives
The question-behavior effect (QBE) refers to the fact that completing questions about a behavior can impact on the likelihood of performing that behavior (e.g., Feldman & Lynch, 1988; Greenwald, Carnot, Beach, & Young, 1987; Morwitz, Johnson, & Schmittlein, 1993; Sherman, 1980). We predicted varying effects of different QBE interventions among those who have and have not performed the behavior of interest in the past. In particular, we predicted that QBE interventions designed to increase attitude accessibility and so increase behavior change might only be effective among those who have previously performed the behavior. This group is more likely, on average, to be positively disposed towards the behavior and less likely to experience

reactance in relation to questions about the behavior. Among those who have not performed the behavior, such QBE interventions may actually be less effective in changing behavior. This is because this group is less likely, on average, to be positively disposed towards the behavior and more likely to experience reactance in relation to questions about the behavior.

For individuals who have not performed the behavior, it may be necessary to tailor QBE interventions to minimize such reactance effects (e.g., avoiding questions that emphasize the clear benefits of a behavior or potential negative affective reactions to not performing the behavior; or perhaps focusing questions on related, more positively evaluated behaviors that are perceived to be less restricting). These predictions were tested in relation to an infrequently performed behavior (influenza vaccination). Past behavior comparison groups constituted those who had or had not recently performed the behavior. In this study we compared different QBE manipulations designed to be more effective among those who had or had not performed the (influenza vaccination) behavior previously.

Ethics approval required
Old ethics approval format

Ethics approval(s)
NRES Committee Yorkshire & The Humber - Leeds West, 12/08/2011, 11/YH/0289

Study design
Interventional randomised controlled trial

Primary study design
Interventional

Secondary study design
Randomised controlled trial

Study setting(s)
Hospital

Study type(s)
Prevention

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
Influenza

Interventions
Participants in all conditions first read a participant information sheet providing details of the study. All those wishing to participate then provided personal identifiers (name, department, email address), job details (job title, whether had patient contact, whether supervised others) and socio-demographic measures (gender, age, marital status, ethnicity, number of children).

1. Participants in the control condition did not complete any further questions
2. Participants in the standard questionnaire condition completed, in order, measures of

anticipated regret, intentions and attitudes in relation to influenza vaccination
3. Participants in standard + beneficence questionnaire condition completed, in order, measures of anticipated regret, beneficence, intentions, and attitudes in relation to influenza vaccination.

Objective measures of behavior (influenza vaccination) during the 2010-11 (past behavior) and 2011-12 (future behavior) campaigns were obtained for participants from vaccination records.

Intervention Type
Behavioural

Primary outcome measure
Any recorded influenza vaccination during the follow-up period

Secondary outcome measures
None

Overall study start date
01/10/2011

Completion date
01/03/2012

Eligibility

Key inclusion criteria
1. The study population consisted of all staff at a single teaching hospital (approximately 15,000 staff) in the UK.
2. Over the 6 months that the study ran (October 2011 to March 2012) a total of 464 staff followed a hyperlink in a Occupational Health Services (OHS) fortnightly e-bulletin and bimonthly e-newsletter, randomly allocating them to one of three conditions. OHS also advertised the research study ('a study of views on influenza vaccination') and included a hyperlink to participate in the study.
3. After removing individuals who had entered the site more than once or who had failed to leave sufficient personal details for them to be identified in order to be able to ascertain their influenza vaccination behavior from records, there was a total of 269 cases.
4. The sample had a mean age of 43 years and was predominantly female (209), married with children, white British and had some patient contact. Just over half supervised others, were health professionals and had been vaccinated for influenza in the previous year. The three test conditions did not differ by age ($p = .61$), gender ($p = .15$), marital status ($p = .63$), ethnicity ($p = .14$), children ($p = .14$), patient contact ($p = .14$), supervision of others ($p = .75$), being health professionals ($p = .85$) or past vaccination ($p = .19$), indicating the success of randomization.

Participant type(s)
Other

Age group
Adult

Sex
Both

Target number of participants
1758

Key exclusion criteria
Does not meet inclusion criteria

Date of first enrolment
01/10/2011

Date of final enrolment
01/03/2012

Locations

Countries of recruitment
England

United Kingdom

Study participating centre
University of Leeds
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Sponsor information

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Sponsor type
University/education

ROR
https://ror.org/024mrxd33

Funder(s)

Funder type
Research council

Funder Name
Economic and Social Research Council

Alternative Name(s)
ESRC

Funding Body Type
Government organisation

Funding Body Subtype
National government

Location
United Kingdom

Results and Publications

Publication and dissemination plan
The details of the trial methods and findings will be reported in a journal paper due to be prepared in 2016.

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Available on request