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Applying behavioural insights to reduce burnout in trainee anaesthetists

Submission date
15/08/2019

Recruitment status
No longer recruiting

Registration date
30/08/2019

Overall study status
Completed

Last Edited
02/02/2022

Condition category
Mental and Behavioural Disorders

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

Plain English summary of protocol

Background and study aims
Burnout affects 20-40% of NHS clinicians. Clinician burnout is linked with worse patient outcomes, reduced clinician wellbeing and negative financial implications for health services. Reducing clinician burnout therefore has the potential to improve healthcare and patient safety. This study aims to reduce burnout and improve wellbeing in trainee anaesthetists through a series of behaviourally informed text messages.

Who can participate?
Anaesthetists in training, working in a UK hospital, registered with the Royal College of Anaesthetists, in training years CT2, ST3, and ST4 are eligible to participate.

What does the study involve?
Half of the trial's participants will be randomly allocated to receive a series of fortnightly supportive text messages over a period of 10 months. The other half (the control group) will receive sign-posting to self-help materials via text. Participation will also involve completion of two short follow-up wellbeing surveys after 3 months of text messages and then again at the end of the trial period (after 10 months of text messages).

What are the possible benefits and risks of participating?
The possible benefit to participants is that their wellbeing might improve and their burnout level might reduce. The risk for research participants in this trial is that the text messages may have an unintended backfire effect, and worsen trainee wellbeing and increase burnout. This risk has been minimised by developing the text messages following a listening exercise with trainees. In addition, the proposed message content and wording has been reviewed and approved by the RCoA and a panel of trainee anaesthetists. Another risk to trainees receiving the intervention messages is that some messages ask the trainee to do something e.g. “Take a moment to think about what makes you a good doctor”. Trainees are very busy and might feel that these texts add to their list of things to do. This burden has been minimised by careful consideration of what to include in the messages. Suggested tasks are small, and taking action on the advice given is optional. In addition, the first message will contain instructions for how trainees can opt to stop receiving the messages if they feel they are too burdensome.

Where is the study run from?
The researchers are based in London. Participants take part in this study from all over the UK.

When is the study starting and how long is it expected to run for?
Recruitment starts on 11/09/2019. The first intervention message is sent approximately one month later and the intervention runs for 10 months.

Who is funding the study?
The Patient Safety Translational Research Centre, Imperial College London.

Who is the main contact?
The main contact for this study is Alix Brazier, who can be emailed with queries at alix.brazier@bi.team.

Contact information

Type(s)
Public

Contact name
Dr Alix Brazier

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Additional identifiers

EudraCT/CTIS number
Nil known

IRAS number

ClinicalTrials.gov number
Nil known

Secondary identifying numbers
1

Study information

Scientific Title
Can a behaviourally informed text message intervention reduce burnout and improve wellbeing in trainee anaesthetists, compared to signposting to pre-existing self-help materials?

Acronym
N/A

Study objectives
A behaviourally informed text message intervention will reduce burnout and improve wellbeing more than signposting to pre-existing self-help materials.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 14/08/2019, the Imperial College Research Ethics Committee (Imperial College London, Room 221, Medical School Building, St Marys Campus, London, W2 1PG; +44 (0)207 594 1872; researchethicscommittee@imperial.ac.uk), ref: 19IC5205.

Study design
Interventional 2-arm randomised controlled trial

Primary study design
Interventional

Secondary study design
Randomised controlled trial

Study setting(s)
Not specified

Study type(s)
Other

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

Health condition(s) or problem(s) studied
Burnout and wellbeing in trainee anaesthetists

Interventions
Current interventions as of 18/08/2020:
This will be a 2-arm individual-level randomised controlled trial, where all participants are sign-posted to self-help materials upon completion of a baseline survey and through an initial text message. Participants will be randomised to treatment or control groups using a random number generator in Stata. Treatment participants will receive a series of 22 fortnightly supportive text messages (over 10 months) incorporating a variety of behavioural insights as well as research from the science of wellbeing. Control participants will receive business-as-usual, i.e. no special support beyond being directed to self-help materials. Both control and treatment participants will be asked to complete two further surveys: a midline survey at 4 months (3 months after first text) to ensure the intervention is not having an unintended backfire effect; and end survey at 10 months. All participants will be sent up to 2 reminder

messages to complete the midline survey, and up to 3 reminder text messages to complete the end survey. At the end of the intervention period, participant feedback on the intervention materials will be sought via a survey.

This main trial will be followed by an interview study with up to 15 treatment-group participants. Treatment-group participants will be asked if they would be interested in participating in an interview at the time of the main trial's end survey.

Previous interventions:
This will be a 2-arm individual-level randomised controlled trial, where all participants are sign-posted to self-help materials upon completion of a baseline survey and through an initial text message. Participants will be randomised to treatment or control groups using a random number generator in Stata. Treatment participants will receive a series of 23 fortnightly supportive text messages (over 10 months) incorporating a variety of behavioural insights as well as research from the science of wellbeing. Control participants will receive business-as-usual, i.e. no special support beyond being directed to self-help materials for managing burnout. Both control and treatment participants will be asked to complete two further surveys: a midline survey at 4 months (3 months after first text) to ensure the intervention is not having an unintended backfire effect; and end survey at 10 months. All participants will be sent up to 2 reminder messages to complete each survey. At the end of the intervention period, participant feedback on the intervention materials will be sought via a survey.

Intervention Type
Behavioural

Primary outcome measure
1. Wellbeing is measured using the Short Warwick-Edinburgh Mental Wellbeing Scale [SWEMWBS] (7 items) at baseline, 3 months and at the end of the intervention.
2. Burnout is measured using the Copenhagen Burnout Inventory [CBI] (7 items) at baseline, 3 months and at the end of the intervention.

Secondary outcome measures
1. Meaningful work is measured using the question “How meaningful do you find your work in general?” [0-10 scale] at baseline and at the end of the intervention.
2. Feeling valued is measured using the question “Overall, how valued do you feel as a trainee anaesthetist?.” [0-10 scale] at baseline and at the end of the intervention.
3. Absenteeism is measured using the question “Over the last 6 months, approximately how many sick days have you taken off work?” at baseline and at the end of the intervention.
4. Intention to stay in profession is measured using the question "Are you considering taking a break in your training in the near future for wellbeing or mental health reasons?" [Yes/No] at the end of the intervention.

Overall study start date
01/10/2017

Completion date
28/02/2021

Eligibility

Key inclusion criteria

1. Trainee anaesthetists.
2. Working in a UK hospital.
3. Registered with the Royal College of Anaesthetists.
4. In training years CT2, ST3 or ST4.

Participant type(s)
Other

Age group
Adult

Sex
Both

Target number of participants
Our slightly conservative estimate is that 1501 participants will be available for recruitment.

Total final enrolment
250

Key exclusion criteria
Does not meet inclusion criteria

Date of first enrolment
11/09/2019

Date of final enrolment
27/09/2019

Locations

Countries of recruitment
United Kingdom

Study participating centre
Trainee anaesthetists working in hospital trusts throughout the UK
United Kingdom
-

Sponsor information

Organisation
The Patient Safety Translational Research Centre, Imperial College London

Sponsor details

Imperial College London
Division of Surgery
10th floor
QEQM St Mary’s Hospital Building
London
United Kingdom
W2 1NY
07866530031
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Sponsor type
Research organisation

Website
https://www.imperial.ac.uk/patient-safety-translational-research-centre

ROR
https://ror.org/041kmwe10

Funder(s)

Funder type
Research organisation

Funder Name
The Patient Safety Translational Research Centre, Imperial College London

Results and Publications

Publication and dissemination plan
The results of the trial will be published in a peer-reviewed journal. A report will also be made available for circulation to a wider, lay audience. We will report the trial findings back to our Burnout Advisory Board, which is made up of clinical and academic experts in the field and includes senior members of the Royal College of Anaesthetists (BIT’s trial partner in this research).

Intention to publish date
15/12/2021

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study are/will be available upon request from Alix Brazier, alix.brazier@bi.team. The data will include the outcome measures and will be de-personalised/anonymised. Data will be available 3 months after article publication and will remain available for 3 years. Data will be made available via secure server with researchers who provide a methodologically sound proposal to achieve the aims set out in

their approved proposal. Participants consented to no personal data being shared. All data will be fully anonymised. We have spoken to both our legal and ethical team who have agreed to this.

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		13/01/2022	02/02/2022	Yes	No