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Teaching safety skills to mental health service providers: a comparison of two training methods

Submission date
05/09/2023

Recruitment status
No longer recruiting

Registration date
06/09/2023

Overall study status
Completed

Last Edited
20/05/2024

Condition category
Other

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

Plain English summary of protocol

Background and study aims
Violence in the workplace is a concern in healthcare and particularly in mental healthcare. Consequently, mental healthcare staff are often required to take safety skills training. However, little is known about what training methods work best. Our study aimed at comparing two training methods for staff in a large Canadian psychiatric hospital to see if one was better than the other in teaching staff safety skills and in improving staff confidence in using those skills. The two methods we compared were behavioral skills training, a method that measured performance and competence, and the hospital's usual training method which demonstrated the skills and allowed staff to practice but which did not measure performance and competence.

Who can participate?
All newly hired hospital staff were required to register for a mandatory safety skills training session. All those who registered and agree to participate in study were included.

What does the study involve?
All registrants went through the mandatory training and had their safety skill and their confidence in using those skills assessed before training started and just after training ended. The skills assessments for those registrants who had agreed to be in the study were videotaped (with their consent) while their confidence levels were assessed using a written questionnaire. Study participants were then asked to come in one month later to have their skills and confidence assessed again.

What are the possible benefits and risks of participating?
None directly to the study participants. The benefits are expected to be for the institution to help it decide how to deliver the training.

Where is the study run from?
The location of the study was the Centre for Addiction and Mental Health, a psychiatric hospital in Toronto, Canada.

When is the study starting and how long is it expected to run for?
January 2020 to October 2021

Who is funding the study?
The study was funded by the Centre for Addiction and Mental Health (Canada)

Who is the main contact?
Dr Elizabeth Lin, elizabethbetty.lin@camh.ca

Contact information

Type(s)
Principal investigator

Contact name
Dr Elizabeth Lin

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Additional identifiers

Protocol serial number
101/2020

Study information

Scientific Title
Behavioral skills training for teaching safety skills to mental health service providers compared to training-as-usual: a pragmatic randomized control trial

Acronym
BSTTAU

Study objectives
Behavioral skills training will be no different than training-as-usual for teaching mental health professionals safety skills or for changing their confidence in using those skills (null hypothesis).

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 07/12/2020, Centre for Addiction and Mental Health Research Ethics Board (33 Ursula Franklin Street, Toronto, M5S 2S1, Canada; +1 4165358501; research.ethics@camh.ca), ref: 101 /2020

Primary study design
Interventional

Study design
Single center interventional pragmatic randomized controlled trial

Study type(s)
Other

Health condition(s) or problem(s) studied
Mandatory safety skills training for all newly hired hospital staff

Interventions
Behavioral skills training (intervention) versus training-as-usual. Behavioral skills training is a performance and competency-based training method that uses a modeling, practice, and feedback loop as assessed by structured checklists to evaluate skill performance and mastery. Training-as-usual involved trainers describing and demonstrating safety skills with time for trainees to practice. However, it does not involve structured and objective performance measurement.

Prior to the scheduled mandatory training sessions, registrants were randomly assigned to sessions and sessions randomly assigned to the intervention or control conditions using GraphPad software. All registrants attended a 30-minute information presentation about the study (immediately preceding their mandatory orientation session) during which they asked questions and were then met, privately and individually, with a research team member to indicate their consent to either participate or not participate. Those consenting were assessed, along with all other registrants, for their safety skills just prior to training and immediately after the 3-hour training session by a skills trainer. Additionally, study participants assessments were, with their consent, videotaped, and they were asked to come back one month later for a follow-up skills assessment. Study participants also completed a self-report survey on their confidence in using these skill at baseline, post-training, and one-month follow-up. For the intervention arm (behavioral skills training), trainers led the registrants through a feedback loop, guided by a skills checklist, in which each step of the skill was explained and demonstrated; the registrants were then asked to practice and repeatedly demonstrate the skill until a predetermined success level as defined by the checklist was achieved before moving on to the next skill. For the control arm (training-as-usual), the same sequence was followed except there was no checklist and no requirement that any particular level of successful performance was achieved before the trainer moved to the next skill.

Intervention Type
Behavioural

Primary outcome(s)
All videotaped assessments for both arms were scored using the skills checklists by raters blind to which condition the participant was assigned to as well as which timepoint (baseline, post-training, and one-month follow-up.)

1. Competence in self-protection and team-control safety skills was measured as the percentage of correct executions observed by the videoraters
2. Mastery calculated using a pre-set threshold -- specifically 80 percent or higher competence scores.

Key secondary outcome(s)
Staff confidence in using skills measured based on a self-reported survey at baseline, post-training, and one-month follow-up

Completion date
30/09/2021

Eligibility

Key inclusion criteria
1. All newly hired hospital staff
2. Registering for mandatory safety skills training
3. Agreeing to participate in the study
4. Signing informed consent

Participant type(s)
Employee

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 Years

Upper age limit
100 Years

Sex
All

Total final enrolment
199

Key exclusion criteria
Does not meet inclusion criteria

Date of first enrolment
01/01/2020

Date of final enrolment
31/10/2021

Locations

Countries of recruitment
Canada

Study participating centre
Centre for Addiction and Mental Health
1025 Queen Street West
Toronto
Canada
M6J1H1

Sponsor information

Organisation
Centre for Addiction and Mental Health

ROR
https://ror.org/03e71c577

Funder(s)

Funder type
Hospital/treatment centre

Funder Name
Centre for Addiction and Mental Health

Alternative Name(s)
Centre for Addiction & Mental Health, Clarke Institute of Psychiatry Addiction Research Foundation, Donwood Institute, Provincial Lunatic Asylum, Asylum for the Insane, Hospital for the Insane, Ontario Hospital, Toronto, Queen Street Mental Health Centre, The Centre for Addiction and Mental Health, Centre de Toxicomanie et de Santé Mentale, CAMH

Funding Body Type
Government organisation

Funding Body Subtype
Research institutes and centers

Location
Canada

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and analyzed during the current study will be available upon request from Elizabeth Lin (elizabeth.lin@camh.ca). Data available will be in de-identified and aggregated form. All participants signed informed consents.

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		17/05/2024	20/05/2024	Yes	No
Protocol article		14/12/2022	06/09/2023	Yes	No