# Development and evaluation of the efficacy of a brief motivational intervention among young adults admitted in the Emergency room while being alcohol intoxicated

Submission date	Recruitment status  No longer recruiting	[X] Prospectively registered			
26/11/2016		☐ Protocol			
Registration date	Overall study status Completed	Statistical analysis plan			
30/11/2016		[X] Results			
<b>Last Edited</b> 03/05/2024	Condition category Injury, Occupational Diseases, Poisoning	Individual participant data			

### Plain English summary of protocol

Current plain English summary as of 08/08/2018:

Background and study aims

Harmful alcohol use among young adults is a major public health concern and accounts for a significant portion of disease burden in Switzerland and worldwide. In Switzerland, Emergency Room admissions for alcohol intoxication have increased substantially over the past decade, particularly among adolescents and young adults. Brief motivational interventions (short programs which aim to motivate people to change their behaviour) for young adults conducted in the Emergency Room have shown promising but inconsistent results. The aim of this study is to test the effectiveness of a new motivational intervention model for young adults admitted in the ER with alcohol intoxication.

### Who can participate?

Patients aged 18-35 who have been admitted in the Lausanne University Hospital Emergency Room for any cause and having alcohol intoxication.

### What does the study involve?

At the start of the study, participants are asked to complete a 10 minute questionnaire, participate in an interview with a research clinician to discuss alcohol use, as well as change in alcohol use if they wish so, and complete a short feedback questionnaire about the interview (3 minutes). They are then randomly allocated to one of two groups. Those in the first group take part in the brief motivational intervention. The programme is delivered while in the ER by a qualified research clinician and takes between 20 and 60 minutes. The programme aims to help participants to help change their drinking behaviour by looking at the discrepancies between their current behaviour and where their broader life goals. After the session, they are sent a letter summing up the discussion (i.e., context, discussion, aims and encouragements). Based on participant's agreement, booster session by phone is conducted after 1 week, 1 month, and 3 months. Those in the second group receive 5-10 minutes of brief advice in the ER to cut down on drinking. Participants in both groups are contacted by phone 1, 3, 6 and 12 months later in order

to complete another questionnaire on alcohol use and related consequences. Each contact lasts for around 15 minutes. In addition, a sample of hair is collected and tested for alcohol use at the start of the study and then again after 6 and 12 months. Medical records are also reviewed after 12 months to find out if any participants have been readmitted to hospital while intoxicated with alcohol.

What are the possible benefits and risks of participating?

There may be no direct benefit to participants. That being said, potential benefits to participants include the possibility to reduce alcohol consumption and related problem; participants also may benefit from clinical assessment, monitoring and referrals as necessary. They might also take advantage of an interview with a trained psychologist to think about their behaviors and their life values and better get to know themselves. The risks of serious adverse consequences as a result of study participation are relatively low. It is possible that some participants will find the interviewing tiresome. They might also have concerns about confidentiality of sensitive information addressed during the intervention. The sensitive nature of some of the questions (e. g., alcohol-related) may cause participants discomfort.

Where is the study run from? Lausanne University Hospital (Switzerland)

When is the study starting and how long is it expected to run for? December 2016 to August 2020 (updated 17/06/2019, previously: May 2019)

Who is funding the study? Swiss National Science Foundation (Switzerland)

Who is the main contact? Dr Jacques Gaume jacques.gaume@chuv.ch

Previous plain English summary:

Background and study aims

Harmful alcohol use among young adults is a major public health concern and accounts for a significant portion of disease burden in Switzerland and worldwide. In Switzerland, Emergency Room admissions for alcohol intoxication have increased substantially over the past decade, particularly among adolescents and young adults. Brief motivational interventions (short programs which aim to motivate people to change their behaviour) for young adults conducted in the Emergency Room have shown promising but inconsistent results. The aim of this study is to test the effectiveness of a new motivational intervention model for young adults admitted in the ER with alcohol intoxication.

### Who can participate?

Patients aged 18-35 who have been admitted in the Lausanne University Hospital Emergency Room for any cause and having alcohol intoxication.

#### What does the study involve?

At the start of the study, participants are asked to complete a 10 minute questionnaire, participate in an interview with a research clinician to discuss alcohol use, as well as change in alcohol use if they wish so, and complete a short feedback questionnaire about the interview (3 minutes). They are then randomly allocated to one of two groups. Those in the first group take part in the brief motivational intervention. The programme is delivered while in the ER by a qualified research clinician and takes between 20 and 60 minutes. The programme aims to help

participants to help change their drinking behaviour by looking at the discrepancies between their current behaviour and where their broader life goals. After the session, they are sent a letter summing up the discussion (i.e., context, discussion, aims and encouragements). Based on participant's agreement, booster session by phone is conducted after 1 week, 1 month, and 3 months. Those in the second group receive 5-10 minutes of brief advice in the ER to cut down on drinking. Participants in both groups are contacted by phone 1, 3, 6 and 12 months later in order to complete another questionnaire on alcohol use and related consequences. Each contact lasts for around 15 minutes. In addition, a sample of hair is collected and tested for alcohol use at the start of the study and then again after 6 and 12 months. Medical records are also reviewed after 12 months to find out if any participants have been readmitted to hospital while intoxicated with alcohol.

What are the possible benefits and risks of participating?

There may be no direct benefit to participants. That being said, potential benefits to participants include the possibility to reduce alcohol consumption and related problem; participants also may benefit from clinical assessment, monitoring and referrals as necessary. They might also take advantage of an interview with a trained psychologist to think about their behaviors and their life values and better get to know themselves. The risks of serious adverse consequences as a result of study participation are relatively low. It is possible that some participants will find the interviewing tiresome. They might also have concerns about confidentiality of sensitive information addressed during the intervention. The sensitive nature of some of the questions (e. g., alcohol-related) may cause participants discomfort.

Where is the study run from? Lausanne University Hospital (Switzerland)

When is the study starting and how long is it expected to run for? December 2016 to May 2019

Who is funding the study?
Health Technology Assessment Programme, National Institute for Health Research (UK)

Who is the main contact? Dr Jacques Gaume

### Contact information

### Type(s)

Scientific

#### Contact name

Dr Jacques Gaume

#### Contact details

Lausanne University Hospital Avenue de Beaumont 21 bis – P2 Lausanne Switzerland 1011

### Additional identifiers

**EudraCT/CTIS** number

**IRAS** number

ClinicalTrials.gov number

### Secondary identifying numbers

Grant 105319\_163123, Swiss National Science Foundation

# Study information

#### Scientific Title

A Process study and Randomized controlled trial examining the Efficacy and Mechanisms of Motivational interviewing for alcohol Intoxicated young adults admitted to the Emergency Room

### **Acronym**

**PREMMIER** 

### **Study objectives**

The primary aim of this trial is to test the efficacy of a brief motivational intervention model (developed in the first part of the PREMMIER project) by comparing it to a control condition receiving a minimal intervention (structured brief advice).

### Null hypothesis:

Both interventions have comparable effects in reducing

- 1. The number of Heavy drinking days (HDD, i.e. the number of days with 6 standard drinks or more, equivalent to 60 grams of pure alcohol or more, over the last month)
- 2. Alcohol-related problems as measured by the Short Inventory of Problems (SIP) total score over 3 the follow-up times (3, 6, and 12 months after intervention)

### Alternative hypothesis:

Participants in the Brief motivational intervention group (experimental condition – intervention model developed in the first phase of the project) reduce

- 1. The number of Heavy drinking days (HDD, i.e. the number of days with 6 standard drinks or more, equivalent to 60 grams of pure alcohol or more, over the last month)
- 2. Alcohol-related problems as measured by the Short Inventory of Problems (SIP) total score, more then participants in the control group (structured brief advice) over the 3 follow-up times (3, 6, and 12 months after intervention)

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

Commission cantonale d'éthique de la recherche sur l'être humain (Ethics Committee of Canton Vaud), 01/11/2016, ref: 2016-01476

### Study design

Single-center two-arm randomized 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 below to request a patient information sheet

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

Alcohol intoxication

#### **Interventions**

Participants will be randomised to one of two groups using an algorithm implemented in the same software used to collect baseline assessment (secuTrial).

Intervention group: The experimental treatment will be a brief motivational intervention (BMI) developed and pre-tested in the first phase of project PREMMIER. BMI will be delivered while in the ER by a qualified research clinician (psychologist, clinical social worker, or nurse) and will last between 20 to 60 minutes. The intervention will use 3 main ingredients, in particular:

- 1. Relational factors (e.g., empathy, acceptance, collaboration, avoidance of confrontation)
- 2. Evoking participants' change talk and strengthening their ability and commitment to change
- 3. Providing information while supporting participants' autonomy.

Overall, the intervention aims at increasing participants' motivation to change their drinking behaviours by enhancing discrepancy between their current behaviour and their broader life goals and values. The intervention focuses on helping participants to resolve the latter discrepancy through evoking and planning behaviour change. When necessary, interventionist will discuss and facilitate referral to alcohol treatment. After the session, the interventionist sends a letter summing up the discussion (i.e., context, discussion, aims and encouragements) to the participant. Based on participant's agreement, booster session by phone will be conducted after 1 week, 1 month, and 3 months.

Control group: The control intervention will be a minimal intervention - Brief advice. Brief advice will be delivered in approximately 5 to 10 minutes. It will led by the same research clinicians and will consist of a standardized brief structured feedback and advice to cut down drinking, with referral to specialist services for the more severe patients (based on the Alcohol Use Disorders Identification Test score included in the baseline assessment).

Participants will complete a short post-session questionnaire while in the ER, and will then be contacted for follow-up assessments at 1, 3, 6, and 12 months post-baseline. Research assistants will conduct follow-up interviews by phone, using a computer assisted program directly recording data electronically in the eCRF (secuTrial). The interview will last 15 to 30 minutes.

### Intervention Type

#### **Behavioural**

### Primary outcome measure

Number of Heavy drinking days over the last month (HDD, i.e. the number of days with 6 standard drinks or more, equivalent to 60 grams of pure alcohol or more) measured using a 30-day Timeline Follow-back technique (TLFB) and the Short Inventory of Problems (SIP) total score at 3, 6 and 12 months post-intervention.

### Secondary outcome measures

- 1. Weekly drinking amount (i.e. number of drinks per week) derived from the Timeline Follow-back technique (TLFB) at 3, 6 and 12 months post-intervention
- 2. Frequency of alcohol-related consequences will be derived from 4 alcohol-related consequences at 3, 6 and 12 months post-intervention
- 3. Alcohol-related problems are assessed using SIP sub-dimension scores (Physical, Social, Intrapersonal, Inter-personal, and Impulse control) at 3, 6 and 12 months post-intervention
- 4. Proportion of patients with hazardous or harmful drinking status is assessed using the Alcohol use disorder identification test (AUDIT) at baseline and 12 months
- 5. Proportion of patients who started alcohol treatment and of patients readmitted to the ER over the 12-month follow-up period will be measured by specific self-report questions at 3, 6 and 12 months post-intervention
- 6. Proportion of patients who started alcohol treatment and of patients readmitted to the ER is measured using Lausanne University Hospital medical records at 12 months post-intervention 7. Heavy drinking is assessed by measuring to Ethyl glucuronide (EtG) concentration in head hair at baseline, 6 and 12 months post-intervention

### Overall study start date

01/12/2016

### Completion date

31/08/2020

# **Eligibility**

### Key inclusion criteria

- 1. Aged between 18 and 35
- 2. Admitted in the Lausanne University Hospital ER (for any cause) and having alcohol intoxication (>0.5 gram/liter BAC or clinical indication of alcohol intoxication)
- 3. Informed consent as documented by signature

### Participant type(s)

Patient

### Age group

Adult

### Lower age limit

18 Years

#### Sex

Both

### Target number of participants

344

### Total final enrolment

344

### Key exclusion criteria

- 1. Life threatening conditions
- 2. Detainees or medico-legal admissions
- 3. Not being fluent in French
- 4. Currently receiving another alcohol or substance use treatment
- 5. Psychiatric or medical contra-indications preventing patients understanding informed consent, fulfilling questionnaires, and participating in the intervention (evaluated using an adaptation of the University of California, San Diego Brief Assessment of Capacity to Consent)

#### Date of first enrolment

01/12/2016

#### Date of final enrolment

31/08/2019

### Locations

#### Countries of recruitment

Switzerland

Thailand

### Study participating centre Lausanne University Hospital

Rue du Bugnon 46 Lausanne Thailand 1011

# Sponsor information

### Organisation

Lausanne University Hospital

#### Sponsor details

Avenue de Beaumont 21 bis – P2 Lausanne Switzerland 1011

### Sponsor type

University/education

#### Website

www.chuv.ch

#### **ROR**

https://ror.org/05a353079

# Funder(s)

### Funder type

Research organisation

#### **Funder Name**

Swiss National Science Foundation

### Alternative Name(s)

Schweizerischer Nationalfonds, Swiss National Science Foundation, Fonds National Suisse de la Recherche Scientifique, Fondo Nazionale Svizzero per la Ricerca Scientifica, Fonds National Suisse, Fondo Nazionale Svizzero, Schweizerische Nationalfonds, SNF, SNSF, FNS

### **Funding Body Type**

Private sector organisation

### **Funding Body Subtype**

Trusts, charities, foundations (both public and private)

#### Location

Switzerland

### **Results and Publications**

### Publication and dissemination plan

Publication in a high-impact peer reviewed journal, to be submitted end of 2019.

### Intention to publish date

31/12/2022

### Individual participant data (IPD) sharing plan

The current data sharing plans for the current study are unknown and will be made available at a later date.

### IPD sharing plan summary

Data sharing statement to be made available at a later date

## Study outputs

Output type	Details			reviewed?	Patient- facing?
Results article		03/10 /2022	24/10 /2022	Yes	No
Other publications	Secondary analysis	28/03 /2024	02/04 /2024	Yes	No
Other publications	Young adults' change talk within brief motivational intervention in the emergency department and booster sessions is associated with a decrease in heavy drinking over 1 year	01/05 /2024	03/05 /2024	Yes	No