BMJ Open

A randomised controlled non-inferiority trial of primary care-based facilitated access to an alcohol reduction website (EFAR Spain): the study protocol.

Journal:	*BMJ Open*
Manuscript ID:	bmjopen-2014-007130
Article Type:	Protocol
Date Submitted by the Author:	06-Nov-2014
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Primary Subject Heading:	Addiction
Secondary Subject Heading:	Patient-centred medicine, Mental health, General practice / Family practice
Keywords:	Substance misuse < PSYCHIATRY, Clinical trials < THERAPEUTICS, World Wide Web technology < BIOTECHNOLOGY & BIOINFORMATICS

Word count: 1782

Abstract count: 295

Number of figures: 1

Number of tables: 0

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Abstract

Introduction: Early identification (EI) and brief interventions (BIs) for risky drinkers are effective tools in primary care. Lack of time in daily practice has been identified as one of the main barriers to implementation of BI. There is growing evidence that facilitated access by primary health care professionals (PCHPs) to a web-based BI can be a time-saving alternative to standard face-to-face BIs but there is as yet no evidence about the effectiveness of this approach relative to conventional BI. The main aim of this study is to test non-inferiority of facilitation to a web-based BI for risky drinkers delivered by PHCP (nurse or GP) against face-to-face BI.

Method and Analysis: Randomised controlled non-inferiority trial comparing both interventions, to be performed in primary care health centres in Catalonia, Spain. Unselected adult patients attending participating centres will be given a leaflet inviting them to log on to a website to complete the AUDIT-C alcohol screening questionnaire. Screen positives will be requested online to complete a trial module including consent, baseline assessment and randomisation to either face to face brief intervention by the practitioner or brief intervention via the alcohol reduction website. Follow up assessment of risky drinking will be undertaken online at 3 months and 1 year using the full AUDIT and D5-EQD5 scale. Proportions of risky drinkers in each group will be calculated and non-inferiority assessed against a specified margin of 10%. Assuming reduction of 30% of risky drinkers receiving standard intervention, 1000 patients will be required to give 90% power to reject the null hypothesis

Ethics and dissemination: The protocol was approved by the Ethics Commmittee of IDIAP Jordi Gol i Gurina P14/028. The findings of the trial will be disseminated through peer-reviewed journals, national and international conference presentations.

Registration details: Trial registration number NCT02082990

Introduction

Risky drinking is a worldwide public health problem. 74% of Europeans aged 15 years or older drink alcohol and 15 % of them (58 million people) drink above the recommended level(1). Around the world, 3,8% of premature deaths and 4,6% of Disability Adjusted Life Years (DALYs) lost are attributable to alcohol use (2).

One out of five patients attended in primary health care are risky drinkers (3). However, the proportion of people who access treatment out of those who need it, varies from just 4% to 14% (4, 5). Early Identification (EI) and brief intervention (BI) are among the most effective approaches for risky drinkers in primary health care (6, 7). However, there is an important gap between research and clinical practice (8). Less than 10% of risky drinkers attended in primary health care benefit from BI (7). The main barriers to implementing EI&BI in primary care are time constraints, lack of financial incentives, insufficient training or absence of services to refer patient to, and risk of upsetting patient (4).

Web-Based Brief Interventions (e-BI) are an alternative to improve the implementation, acceptance and viability of BI and to overcome barriers which have hampered their use in daily practice (9, 10). The provision of facilitated access by primary care professionals to an alcohol reduction website could significantly increase brief intervention rates by offering a time-saving alternative to face to face intervention. Many studies have shown the efficacy of computer-based interventions in getting college students to reduce their alcohol consumption (11, 12). The use of new technologies for mental health problems is becoming common in primary care, as for example in smoking cessation (13). A review of trials of computer based interventions in college drinkers found them to be more effective than no treatment and as effective as alternative treatment approaches (11).

Down Your Drink (http://www.downyourdrink.org.uk) is an online intervention developed in United Kingdom based on BI, cognitive-behaviour therapy, self-control therapy and motivational interviewing. An online trial of Down Your Drink indicated potentially significant reductions in alcohol consumption and risky drinking behaviours in subjects who used the trial websites (14) and following this, a number of initiatives have been initiated to test the acceptability and effectiveness of facilitating access to websites of this kind in primary care settings. The EU-funded ODHIN trial (15) currently underway in 5 European countries is designed to determine the impact of facilitated access on levels of implementation of brief interventions by primary care practitioners. The EFAR FVG study in the Friuli Venezia Giulia region in Northern Italy (16) has been designed to test the effectiveness relative to face to face intervention of facilitated access to an Italian version of DownYourDrink by general practitioners. This trial involves 40 general practices and has recruited more than 500 patients(16).

In Catalonia, no efficacy studies on e-BI exist. However, some limited e-BI initiatives have been undertaken in order to support the implementation of the “Beveu Menys” program (17), a program aimed at implementing EI&BI by, among other strategies, identifying a Network of Alcohol Referents in Primary Health Care (XaROH) throughout the territory and providing continuous training and support to them. An on-line quantity-frequency tool was developed and promoted to be used as general population awareness-raising tool with promising results (18). More recently, in the context of the ODHIN project (19), an e-BI tool, adapted from Drinkers Check-Up (20), was used to test facilitated access only but results are still under analysis.

We present the protocol of the study which aims to test non-inferiority of a web-based BI for risky drinkers against a traditional face-to-face BI delivered by PHCP (nurse and GPs).

Method

Trial design: Randomized non-inferiority controlled trial in primary care comparing facilitated access to web-site for risky drinkers with standard face-to-face BI. With the exception of the non-experimental intervention, all components of the study will be administered online to patients. Patients will be actively encouraged by their primary health care professional to access to the application which is available on the web-site of the program "Beveu Menys", from the Program on Substance Abuse of the Government of Catalonia, and will be provided with a unique registration code.

The trial web-site is a Spanish adaptation from English version of www.DownYourDrink.org.uk controlled trials (DYD) developed in the UK, which includes modules for all the key trial components including screening, consent, assessment, randomisation and follow-up. It also incorporates the alcohol reduction website for the patients in the experimental group. The site has been adapted from the www.DownYourDrink.org.uk (DYD) website developed for the DYD-RCT trial (14). Details of DYD and the psychological theory which underpinned its development have been reported elsewhere(21). Country-specific information such as recommended guidelines for alcohol intake, definitions of standard drinks and alcohol-related laws will be included. The website also incorporates a menu-driven facility to enable PHCP to customize automated messages to patients, for example by adding photographs and pre-recorded messages. The personalised messages will appear to each patient using the log in code provided by that practitioner.

Practitioner recruitment, training and incentives: Recruitment will be based on the XarOH network. A 3-hour seminar on new technologies and EI&BI, introducing the trial, will be offered to all members of the XaROH and those attending will be invited to sign up for the trial. In addition, several advertisements will be posted on the XarOH website platform offering participation in the trial. In selecting practices, preference will be given to those with at least 5000 registered patients. Those practices which are selected as participants will be required to undergo a one day training programme. The training has four steps: 1) Introduction to trial; 2) Familiarisation with website; 3) Update about EI&BI; 4) Practice in EI&BI (Role-playing). Finally, participants will be encouraged to use the web-site and tailor patient messages. Participating PHCPs will receive a financial incentive of €20 per patient recruited to the trial.

Patient eligibility

Inclusion criteria: patients aged 18 years or older attending the participating practices during the study period.

Exclusion criteria: those suffering from severe psychiatric disorders, serious visual impairment or terminal illness, those having inadequate command of the Spanish or Catalan language, or AUDIT ≥ 18 in baseline assessment. Excluded patients will be referred to PHCP to consider other interventions.

Screening and Consent: Eligible patients will be will be given a trial brochure by their GP or nurse and actively encouraged to access the specially designed website hosted on the web-site of the program "Beveu Menys." Each brochure will include a unique access number which will enable the patient to log on to the website. All patients who access to the web-site will be informed about the trial and will be asked to complete an online form confirming

that they do not meet any of the exclusion criteria and then be invited to complete the online consent module. They will be asked to complete online version of short Alcohol Use Disorders Identification Test (AUDIT-C) (22). Cut-off points for the purpose of the trial will be 4 for women and 5 for men. Those screening negative will be informed that their responses indicated acceptable drinking patterns according to national guidelines and will be encouraged not to increase their alcohol consumption. Those scoring at or above the cut-off point will be invited by tailored online message from their PCHP to take part in the study as they present risky drinking pattern (See figure 1).

Baseline assessment: includes a demographic questionnaire (age, gender, level of education and occupation), the 10- question Alcohol Use Disorder Test Spanish version (23) and D5-EQ D5, the quality-of-life questionnaire, validated in Spanish versions (24, 25).

Randomisation: Those patients who complete the baseline assessment will undergo automated online randomisation (1:1). Experimental group patients will be taken direct to the registration page of the alcohol reduction website where they will receive the personalised message from the PHCP who gave them the brochure with tailored feedback about their responses to the alcohol questionnaires. Personalised online messages from their PHCP will inform the patients of the importance of adopting healthy drinking choices and will encourage them to spend at least 15 minutes engaging with the alcohol reduction website in the first instance. The patients will also receive an email one week later encouraging them to log on again to review their alcohol consumption. Online messages will also encourage the patients to discuss their website experience when they next see their PHCP.

Reference group patients will receive an online message asking them to make an appointment to see their PCHP to discuss their drinking, and an automatically generated e-mail will also be sent to their PCHP to set up a visit in the next 7-10 days. At the appointment, the patient will receive a face to face brief motivational interview with the following components: 1) Assessment of the motivation to change. 2) Assessment of the stage of change. 3) Advice on changing drinking pattern. 4) Empathy. 5) Capacity Building.

Non-attenders will be offered up to three additional recalls.

Follow-up assessment

Follow-up will take place at 3 and 12 months after randomisation, and each assessment will consist of the following instruments:

1. The 10-question AUDIT validated Spanish version.
2. D quality of life questionnaire, validated Spanish version 5—The EQ.

Up to 3 attempts by e-mail will be made to ensure follow-up. The last attempt will be made by PHCP by letter, phone or in person

Statistical analysis

The primary outcome will be the proportion of patients classified as risky drinkers by the AUDIT-10 at month 3 after the randomization.

Aiming to assess the non-inferiority of facilitated access compared with standard face-to-face intervention, the proportion of risky drinkers in both groups will be compared using generalised non-linear mixed models. Non-inferiority will be considered if the difference between groups is not greater than 10%. Accepting a reduction of 30% in the proportion of risky drinkers in control group and expecting an overall attrition of 10%, 500 patients in each group will be needed to reject the null hypothesis (facilitated access is inferior to standard face-to-face intervention) with the trial 90% power.

All analysis details will be set up in a pre-designated statistical analysis pan before the data are accessed.

Impact on screening rates of facilitated access to the alcohol reduction web-site

It is hypothesised that the use of facilitated access to the alcohol reduction website will lead to an increase in alcohol screening rates in the trial practices. A sub-study will therefore be carried out comparing pre- and post-trial alcohol screening rates in the participating practices, calculated on the basis of entries in the electronic care records of patients attending over a six month period. Further analysis will be carried out with a matched control group of practices who did not participate in the EFAR trial.

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Contributors

HL, AG, LS and PW are the principal investigators who designed the study and drafted the article. Other authors have made substantial contributions to the conception and design of the project. All authors read and approved the final manuscript.

Funding

This work has been funded by project PI042924 integrated in the National R + D + I and funded by the Carlos III Health Institute-Deputy General Assessment and the European Regional Development Fund (ERDF)."

Competing interest

Antoni Gual has received honoraria, research grants and travel grants from Lundbeck Janssen, Pfizer, Lilly, Abbvie D&A Pharma, and Servier. Hugo López-Pelayo has received travel grants from Lundbeck, Lilly, Janssen, Pfizer, Rovi and Esteve. Other authors have no conflicts of interest.

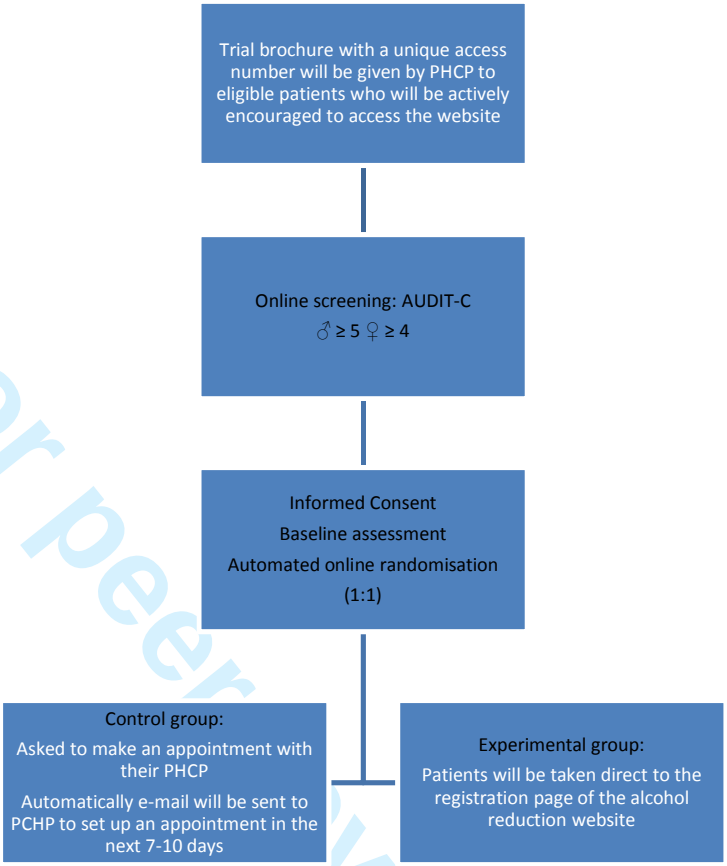
Ethics approval

The protocol was approved on P14/028 by the Ethics Committee, IDIAP Jordi Gol i Gurina.

Acknowledgments

This work is supported by following institutions: University College of London (UCL), Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Hospital Clínic i Universitari de Barcelona, and the Program on Substance Abuse (Public Health Agency, Government of Catalonia)

Figure 1. Flowchart: recruitment process.



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In Catalonia, one out of five patients attending primary health care are risky drinkers (3). However, the proportion of people who access treatment out of those who need it varies from just 4% (Germany) to 23% (Italy). In Spain, the percentage of the in-need population accessing treatment is 15.3% (4, 5)

Early Identification (EI) and brief intervention (BI) are among the most effective approaches for risky drinkers in primary health care (6, 7) However, there is an important gap between research and clinical practice (8). Less than 10% of risky drinkers attended in primary health care benefit from BI (7). The main barriers to implementing EI&BI in primary care are time constraints, lack of financial incentives, insufficient training or absence of services to refer patient to, and risk of upsetting patient (4).Web-Based Brief Interventions (e-BI) are an alternative to improve the implementation, acceptance and viability of BI and to overcome barriers which have hampered their use in daily practice (9, 10). The provision of facilitated access by primary care professionals to an alcohol reduction website could significantly increase brief intervention rates by offering a time-saving alternative to face to face intervention. Many studies have shown the efficacy of computer-based interventions in getting college students to reduce their alcohol consumption (11, 12). The use of new technologies for mental health problems is becoming common in primary care, as for example in smoking cessation (13). A review of trials of computer based interventions in college drinkers found them to be more effective than no treatment and as effective as alternative treatment approaches (11).

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In Catalonia, no efficacy studies on e-BI exist. However, some limited e-BI initiatives have been undertaken in order to support the implementation of the “Beveu Menys” program (17), a program aimed at implementing EI&BI by, among other strategies, identifying a Network of Alcohol Referents in Primary Health Care (XaROH) throughout the territory and

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We present the protocol of a randomised controlled non-inferiority trial (1:1) which aims to test non-inferiority of a web-based BI for risky drinkers against a traditional face-to-face BI delivered by PHCP (nurse and GPs).

Method

Trial design: Randomized non-inferiority controlled trial in primary care comparing facilitated access to web-site for risky drinkers with standard face-to-face BI. With the exception of the non-experimental intervention, all components of the study will be administered online to patients. Patients will be actively encouraged by their primary health care professional to access to the application which is available on the web-site of the program "Alcohol y Salud" (www.alcoholysalud.cat), and will be provided with a unique registration code.

The trial web-site is a Spanish adaptation of the English version of www.DownYourDrink.org.uk (DYD) developed in the UK, which includes modules for all the key trial components including screening, consent, assessment, randomisation and follow-up. It also incorporates the alcohol reduction website for the patients in the experimental group. The site has been adapted from the www.DownYourDrink.org.uk (DYD) website developed for the DYD-RCT trial (14). Details of DYD and the psychological theory which underpinned its development have been reported elsewhere(21). Country-specific information such as recommended guidelines for alcohol intake, definitions of standard drinks and alcohol-related laws will be included. The website also incorporates a menu-driven facility to enable PHCP to customize automated messages to patients, for example by adding photographs and pre-recorded messages. The personalised messages will appear to each patient using the log-in code provided by that practitioner.

Practitioner recruitment, training and incentives: Recruitment will be based on the XaROH network. A 3-hour seminar on new technologies and EI&BI, introducing the trial, will be offered to all members of the XaROH and those attending will be invited to sign up for the trial. In addition, several advertisements will be posted on the "Beveu Menys" platform offering participation in the trial. In selecting practices, preference will be given to those with at least 5000 registered patients. Those practices which are selected as participants will be required to undergo a one day training programme. The training has four steps: 1) Introduction to trial; 2) Familiarisation with website; 3) Update about EI&BI; 4) Practice in EI&BI (Role-playing). Finally, participants will be encouraged to use the web-site and tailor patient messages. Participating PHCPs will receive a financial incentive of €20 per patient recruited to the trial.

Patient eligibility

Inclusion criteria: patients aged 18 years or older attending the participating practices during the study period.

Exclusion criteria: those suffering from severe psychiatric disorders, serious visual impairment or terminal illness, those having inadequate command of the Spanish or Catalan language, or AUDIT ≥ 18 in baseline assessment. Excluded patients will be referred to PHCP to consider other interventions.

Screening and Consent: Eligible patients will be will be given a trial brochure by their GP or nurse and actively encouraged to access the specially designed website "www.alcoholysalud.cat." Each brochure will include a unique access number which will enable the patient to log on to the website. All patients who access the web-site will be informed about the trial and asked to complete an online form confirming that they do not meet any of the exclusion criteria and inviting them to complete the online consent module. They will then be asked to complete an online version of the short Alcohol Use Disorders Identification Test (AUDIT-C) (22). Cut-off points for the purpose of the trial will be 4 for women and 5 for men. Those screening negative will be informed that their responses indicated acceptable drinking patterns according to national guidelines and will be encouraged not to increase their alcohol consumption. Those scoring at or above the cut-off point will be invited by tailored online message from their PCHP to take part in the study as they present a risky drinking pattern (See figure 1).

Baseline assessment: includes a demographic questionnaire (age, gender, level of education and occupation), the 10- question Alcohol Use Disorder Test Spanish version (23) and D5-EQ D5, the quality-of-life questionnaire, validated in Spanish versions (24, 25).

Randomisation and intervention: Those patients who complete the baseline assessment will undergo automated online randomisation by a specific module of website (1:1). Experimental group patients will be taken direct to the registration page of the alcohol reduction website "Alcohol y Salud" (www.alcoholysalud.cat), where they will receive a personalised message from the PHCP who gave them the brochure with tailored feedback about their responses to the alcohol questionnaires. Personalised online messages from their PHCP will inform the patients of the importance of adopting healthy drinking choices and will encourage them to spend at least 15 minutes engaging with the alcohol reduction website in the first instance. Each participating PHCP will have access to the section of website enabling them to personalize their messages. (see "Trial website"). Patients will also receive an email one week later encouraging them to log on again to review their alcohol consumption. Online messages will also encourage the patients to discuss their website experience when they next see their PHCP.

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Non-attenders will be offered up to three additional recalls.

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Follow-up will take place at 3 and 12 months after randomisation, and each assessment will consist of the following instruments:

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2. The EQ-5D-5 self-complete Spanish version (http://www.euroqol.org/eq-5d-products/eq-5d-5l.html)
Up to 3 attempts by e-mail will be made to ensure follow-up. The last attempt will be made by PHCP by letter, phone or in person. There are no restrictions to concomitant care.

Data security and storage
In order to ensure the security of personal data of participating patients and healthcare professionals, the site will be hosted on its own separate server which will be maintained and monitored closely throughout the project.
All communication between participants or PHCP and the web server will take place over an encrypted "http" connection.
Similarly, any interaction with the web-server by research staff or technical maintenance staff will be over a secure connection.
Access to the website and web server will be restricted to a small number of research and technical staff. The data will be collected and stored in accordance with best practices. All data outcome data will be anonymised and identifiable only by a patient's unique ID and code.
Access to the final trial dataset will be limited to the research team.

Statistical analysis
The primary outcome will be the proportion of patients classified as risky drinkers by the AUDIT-10 at month 3 after the randomization.
Aiming to assess the non-inferiority of facilitated access compared with standard face-to-face intervention, the proportion of risky drinkers in both groups will be compared using generalised non-linear mixed models. Non-inferiority will be considered if the difference between groups is not greater than 10%. Based on an anticipated reduction of 30% in the proportion of risky drinkers in control group and an overall attrition of 10%, it is calculated that 500 patients in each group will be needed to reject the null hypothesis (facilitated access is inferior to standard face-to-face intervention) with 90% power.
No interim analysis is planned.

All analysis details will be set up in a pre-designated statistical analysis pan before the data are accessed.

Impact on screening rates of facilitated access to the web-site
It is hypothesised that the provision of facilitated access to the website will lead to an increase in alcohol screening rates in the trial practices. A sub-study will therefore be carried out comparing pre- and post-trial alcohol screening rates in the participating practices, calculated on the basis of entries in the electronic care records of patients attending over a six month period. Further comparison will be carried out with a matched control group of practices who did not participate in the EFAR trial.

Discussion

The trial has several strengths. The research team includes international expertise and the protocol benefits from extensive experience gained through the EFAR FVG trial, which has recruited well and achieved high rates of follow-up. Recruitment of PHCPs will be achieved using an established, structured and well-trained network which has been involved in previous alcohol projects including ODHIN, PHEPA and Beveu Menys . The trainers have also had extensive experience of SBI training, and the network includes both nursing and medical professionals, thus offering the potential to recruit a wide range of patients. It is the first trial testing the utility of facilitated access in Spain. It is done in the context of the daily work of primary Health care professionals and can be embedded in the alcohol SBI activities undertaken in Catalonia until now. It is a natural evolution of the work being done and if results are positive such a website could be included in the future in the personal file of PHC and promoted as a complementary tool throughout all PHC centres

There may be initial professional resistance to engaging with facilitated access activity as the trial will be carried out by PHCP's with little or no experience of promoting the use of the internet for the delivery of alcohol screening and brief intervention. However, we have taken account of this by using conservative estimates in calculating the anticipated facilitated access rates, and will offer training to all the participating PHCPs in order to overcome usability problems. The current version of the website has been well-accepted by Italian professionals and patients (26) and all the professionals participating in the EFAR Spain trial will be invited to familiarise themselves with the website prior to the start of the trial. Furthermore, the research team will provide continuous support though e-mail, an Internet forum and by telephone. Support materials will also be provided, including Frequently Asked Questions (FAQs), feedback data and alcohol-related problems management documents.

It is likely that a degree of selection bias will result from increased participation by younger and better educated patients likely to be more familiar with the Internet. However, baseline assessment will provide data on a range of demographics, enabling comparisons to be made with the general population. While it is also possible that the trial will select more motivated participants who are especially concerned about their alcohol use, randomisation should ensure that these effects are equally distributed between the intervention and control groups.

In conclusion, while the trial poses significant challenges, it also has the benefit of international experience and expertise and delivery by PCHPs from a structured network with extensive previous experience.

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Contributors

HL, AG, LS and PW are the principal investigators who designed the study and drafted the article. Other authors have made substantial contributions to the conception and design of the project. All authors read and approved the final manuscript.

Funding

This work has been funded by project PI042924 integrated in the National R + D + I and funded by the Carlos III Health Institute-Deputy General Assessment and the European Regional Development Fund (ERDF)." (www.isciii.es). They have no responsibility for study design; collection, management, analysis, and interpretation of data; writing of the report; and the decision to submit the report for publication.

Competing interest

Antoni Gual has received honoraria, research grants and travel grants from Lundbeck Janssen, Pfizer, Lilly, Abbvie D&A Pharma, and Servier. Hugo López-Pelayo has received travel grants from Lundbeck, Lilly, Janssen, Pfizer, Rovi and Esteve. Other authors have no conflicts of interest.

Dissemination policy

Trial results will be communicated by publications –preferably open-access journals-, , national (e.g. *Jornadas Socidrogalcohol)* and international meetings (e.g. INEBRIA) during 2016 and/or 2017.
Authorship of future results will include research team on behalf of EFAR-Spain group (all participants PHCPs)

Ethics approval

The protocol was approved on P14/028 by the Ethics Committee, IDIAP Jordi Gol i Gurina. Any amendment protocol would be communicated to the ethics committee and published on clinicaltrials.gov.

Acknowledgments

This work is supported by the following institutions: University College of London (UCL), Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Hospital Clínic i Universitari de Barcelona, and the Program on Substance Abuse (Public Health Agency, Government of Catalonia)

Technical support is provided by Daniel Berzon and Richard McGregor from Codeface.

Special acknowledgments to all professionals participating in field work (EFAR Research Group) and members of XaROH.

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Word count: 2449

Abstract count: 300

Number of figures: 1

Number of tables: 0

A randomised controlled non-inferiority trial of primary care-based facilitated access to an alcohol reduction website (EFAR Spain): the study protocol.

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Abstract

Introduction: Early identification (EI) and brief interventions (BIs) for risky drinkers are effective tools in primary care. Lack of time in daily practice has been identified as one of the main barriers to implementation of BI. There is growing evidence that facilitated access by primary health care professionals (PCHPs) to a web-based BI can be a time-saving alternative to standard face-to-face BIs but there is as yet no evidence about the effectiveness of this approach relative to conventional BI. The main aim of this study is to test non-inferiority of facilitation to a web-based BI for risky drinkers delivered by PHCP against face-to-face BI.

Method and Analysis: Randomised controlled non-inferiority trial comparing both interventions, to be performed in primary care health centres in Catalonia, Spain. Unselected adult patients attending participating centres will be given a leaflet inviting them to log on to a website to complete the AUDIT-C alcohol screening questionnaire. Participants with positive results will be requested online to complete a trial module including consent, baseline assessment and randomisation to either face to face brief intervention by the practitioner or brief intervention via the alcohol reduction website. Follow up assessment of risky drinking will be undertaken online at 3 months and 1 year using the full AUDIT and D5-EQD5 scale. Proportions of risky drinkers in each group will be calculated and non-inferiority assessed against a specified margin of 10%. Assuming reduction of 30% of risky drinkers receiving standard intervention, 1000 patients will be required to give 90% power to reject the null hypothesis

Ethics and dissemination: The protocol was approved by the Ethics Commmittee of IDIAP Jordi Gol i Gurina P14/028. The findings of the trial will be disseminated through peer-reviewed journals, national and international conference presentations.

Registration details: Trial registration number ClinicalTrials.gov NCT02082990

Protocol version: 2. October 2014

Introduction

Risky drinking is a worldwide public health problem. 74% of Europeans aged 15 years or older drink alcohol and 15 % of them (58 million people) drink above the recommended level (1). Around the world, 3,8% of premature deaths and 4,6% of Disability Adjusted Life Years (DALYs) lost are attributable to alcohol use (2).

In Catalonia, one out of five patients attending primary health care are risky drinkers (3). However, the proportion of people who access treatment out of those who need it varies from just 4% (Germany) to 23% (Italy). In Spain, the percentage of the in-need population accessing treatment is 15.3% (4, 5)

Early Identification (EI) and brief intervention (BI) are among the most effective approaches for risky drinkers in primary health care (6, 7) However, there is an important gap between research and clinical practice (8). Less than 10% of risky drinkers attended in primary health care benefit from BI (7). The main barriers to implementing EI&BI in primary care are time constraints, lack of financial incentives, insufficient training or absence of services to refer patient to, and risk of upsetting patient (4).Web-Based Brief Interventions (e-BI) are an alternative to improve the implementation, acceptance and viability of BI and to overcome barriers which have hampered their use in daily practice (9, 10). The provision of facilitated access by primary care professionals to an alcohol reduction website could significantly increase brief intervention rates by offering a time-saving alternative to face to face intervention. Many studies have shown the efficacy of computer-based interventions in getting college students to reduce their alcohol consumption (11, 12). The use of new technologies for mental health problems is becoming common in primary care, as for example in smoking cessation (13). A review of trials of computer based interventions in college drinkers found them to be more effective than no treatment and as effective as alternative treatment approaches (11).

Down Your Drink (http://www.downyourdrink.org.uk) is an online intervention developed in United Kingdom based on BI, cognitive-behaviour therapy, self-control therapy and motivational interviewing. An online trial of Down Your Drink indicated potentially significant reductions in alcohol consumption and risky drinking behaviours in subjects who used the trial websites (14) and following this, a number of initiatives have been initiated to test the acceptability and effectiveness of facilitating access to websites of this kind in primary care settings. The EU-funded ODHIN trial (15) currently underway in 5 European countries is designed to determine the impact of facilitated access on levels of implementation of brief interventions by primary care practitioners. The EFAR FVG study in the Friuli Venezia Giulia region in Northern Italy (16) has been designed to test the effectiveness relative to face to face intervention of facilitated access to an Italian version of DownYourDrink by general practitioners. This trial involves 40 general practices and has recruited more than 500 patients(16). EFAR-Spain is based on EFAR-FVG, but there are the following differences: 1) participation is open to both doctors and nurses; 2) Primary health care centres are constituted by a team of different professionals (nursing, medicine, social work, administration, etc). 3) The website has been not only translated but also adapted to the Spanish culture.

In Catalonia, no efficacy studies on e-BI exist. However, some limited e-BI initiatives have been undertaken in order to support the implementation of the “Beveu Menys” program (17), a program aimed at implementing EI&BI by, among other strategies, identifying a Network of Alcohol Referents in Primary Health Care (XaROH) throughout the territory and

providing continuous training and support to them. An on-line quantity-frequency tool was developed and promoted to be used as general population awareness-raising tool with promising results (18). More recently, in the context of the ODHIN project (19), an e-BI tool, adapted from Drinkers Check-Up (20), was used to test facilitated access only but results are still under analysis.

We present the protocol of a randomised controlled non-inferiority trial (1:1) which aims to test non-inferiority of a web-based BI for risky drinkers against a traditional face-to-face BI delivered by PHCP (nurse and GPs).

Method

Trial design: Randomized non-inferiority controlled trial in primary care comparing facilitated access to web-site for risky drinkers with standard face-to-face BI. With the exception of the non-experimental intervention, all components of the study will be administered online to patients. Patients will be actively encouraged by their primary health care professional to access to the application which is available on the web-site of the program "Alcohol y Salud" (www.alcoholysalud.cat), and will be provided with a unique registration code.

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Exclusion criteria: those suffering from severe psychiatric disorders, serious visual impairment or terminal illness, those having inadequate command of the Spanish or Catalan language, or AUDIT ≥ 18 in baseline assessment. Excluded patients will be referred to PHCP to consider other interventions.

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Control group patients will receive an online message asking them to make an appointment to see their PCHP to discuss their drinking, and an automatically generated e-mail will also be sent to their PCHP to set up a visit in the next 7-10 days. At the appointment, the patient will receive a face to face brief motivational interview with the following components: 1) Assessment of the motivation to change. 2) Assessment of the stage of change. 3) Advice on changing drinking pattern. 4) Empathy. 5) Capacity Building.

Non-attenders will be offered up to three additional recalls.

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1. The 10-question AUDIT validated Spanish version.

2. The EQ-5D-5 self-complete Spanish version (http://www.euroqol.org/eq-5d-products/eq-5d-5l.html)

Up to 3 attempts by e-mail will be made to ensure follow-up. The last attempt will be made by PHCP by letter, phone or in person. There are no restrictions to concomitant care.

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In order to ensure the security of personal data of participating patients and healthcare professionals, the site will be hosted on its own separate server which will be maintained and monitored closely throughout the project.

All communication between participants or PHCP and the web server will take place over an encrypted "http" connection.

Similarly, any interaction with the web-server by research staff or technical maintenance staff will be over a secure connection.

Access to the website and web server will be restricted to a small number of research and technical staff. The data will be collected and stored in accordance with best practices. All data outcome data will be anonymised and identifiable only by a patient's unique ID and code.

Access to the final trial dataset will be limited to the research team.

Statistical analysis

The primary outcome will be the proportion of patients classified as risky drinkers by the AUDIT-10 at month 3 after the randomization.

Aiming to assess the non-inferiority of facilitated access compared with standard face-to-face intervention, the proportion of risky drinkers in both groups will be compared using generalised non-linear mixed models. Non-inferiority will be considered if the difference between groups is not greater than 10%. Based on an anticipated reduction of 30% in the proportion of risky drinkers in control group and an overall attrition of 10%, it is calculated that 500 patients in each group will be needed to reject the null hypothesis (facilitated access is inferior to standard face-to-face intervention) with 90% power.

No interim analysis is planned.

All analysis details will be set up in a pre-designated statistical analysis pan before the data are accessed.

Impact on screening rates of facilitated access to the web-site

It is hypothesised that the provision of facilitated access to the website will lead to an increase in alcohol screening rates in the trial practices. A sub-study will therefore be carried out comparing pre- and post-trial alcohol screening rates in the participating practices, calculated on the basis of entries in the electronic care records of patients attending over a six month period. Further comparison will be carried out with a matched control group of practices who did not participate in the EFAR trial.

Discussion

The trial has several strengths. The research team includes international expertise and the protocol benefits from extensive experience gained through the EFAR FVG trial, which has recruited well and achieved high rates of follow-up. Recruitment of PHCPs will be achieved using an established, structured and well-trained network which has been involved in previous alcohol projects including ODHIN, PHEPA and Beveu Menys . The trainers have also had extensive experience of SBI training, and the network includes both nursing and medical professionals, thus offering the potential to recruit a wide range of patients. It is the first trial testing the utility of facilitated access in Spain. It is done in the context of the daily work of primary Health care professionals and can be embedded in the alcohol SBI activities undertaken in Catalonia until now. It is a natural evolution of the work being done and if results are positive such a website could be included in the future in the personal file of PHC and promoted as a complementary tool throughout all PHC centres

There may be initial professional resistance to engaging with facilitated access activity as the trial will be carried out by PHCP's with little or no experience of promoting the use of the internet for the delivery of alcohol screening and brief intervention. However, we have taken account of this by using conservative estimates in calculating the anticipated facilitated access rates, and will offer training to all the participating PHCPs in order to overcome usability problems. The current version of the website has been well-accepted by Italian professionals and patients (26) and all the professionals participating in the EFAR Spain trial will be invited to familiarise themselves with the website prior to the start of the trial. Furthermore, the research team will provide continuous support though e-mail, an Internet forum and by telephone. Support materials will also be provided, including Frequently Asked Questions (FAQs), feedback data and alcohol-related problems management documents.

It is likely that a degree of selection bias will result from increased participation by younger and better educated patients likely to be more familiar with the Internet. However, baseline assessment will provide data on a range of demographics, enabling comparisons to be made with the general population. While it is also possible that the trial will select more motivated participants who are especially concerned about their alcohol use, randomisation should ensure that these effects are equally distributed between the intervention and control groups.

In conclusion, while the trial poses significant challenges, it also has the benefit of international experience and expertise and delivery by PCHPs from a structured network with extensive previous experience.

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Contributors

HL, AG, LS and PW are the principal investigators who designed the study and drafted the article. Other authors have made substantial contributions to the conception and design of the project. All authors read and approved the final manuscript.

Funding

This work has been funded by project PI042924 integrated in the National R + D + I and funded by the Carlos III Health Institute-Deputy General Assessment and the European Regional Development Fund (ERDF)." (www.isciii.es). They have no responsibility for study design; collection, management, analysis, and interpretation of data; writing of the report; and the decision to submit the report for publication.

Competing interest

Antoni Gual has received honoraria, research grants and travel grants from Lundbeck Janssen, Pfizer, Lilly, Abbvie D&A Pharma, and Servier. Hugo López-Pelayo has received travel grants from Lundbeck, Lilly, Janssen, Pfizer, Rovi and Esteve. Other authors have no conflicts of interest.

Dissemination policy

Trial results will be communicated by publications –preferably open-access journals-, , national (e.g. *Jornadas Socidrogalcohol)* and international meetings (e.g. INEBRIA) during 2016 and/or 2017.
Authorship of future results will include research team on behalf of EFAR-Spain group (all participants PHCPs)

Ethics approval

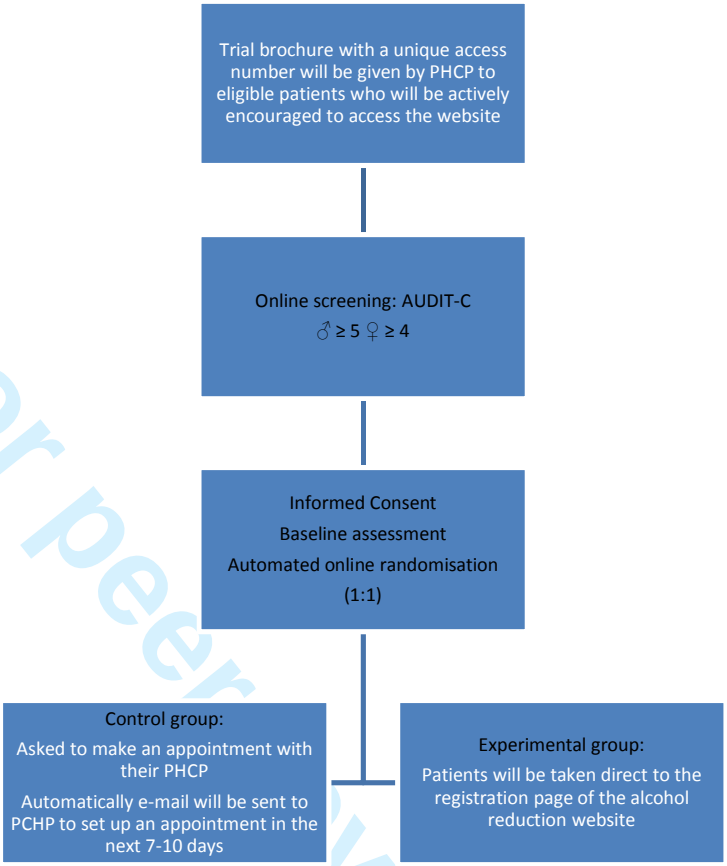
The protocol was approved on P14/028 by the Ethics Committee, IDIAP Jordi Gol i Gurina. Any amendment protocol would be communicated to the ethics committee and published on clinicaltrials.gov.

Acknowledgments

This work is supported by the following institutions: University College of London (UCL), Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Hospital Clínic i Universitari de Barcelona, and the Program on Substance Abuse (Public Health Agency, Government of Catalonia)

Technical support is provided by Daniel Berzon and Richard McGregor from Codeface. Special acknowledgments to all professionals participating in field work (EFAR Research Group) and members of XaROH.

Figure 1. Flowchart: recruitment process.



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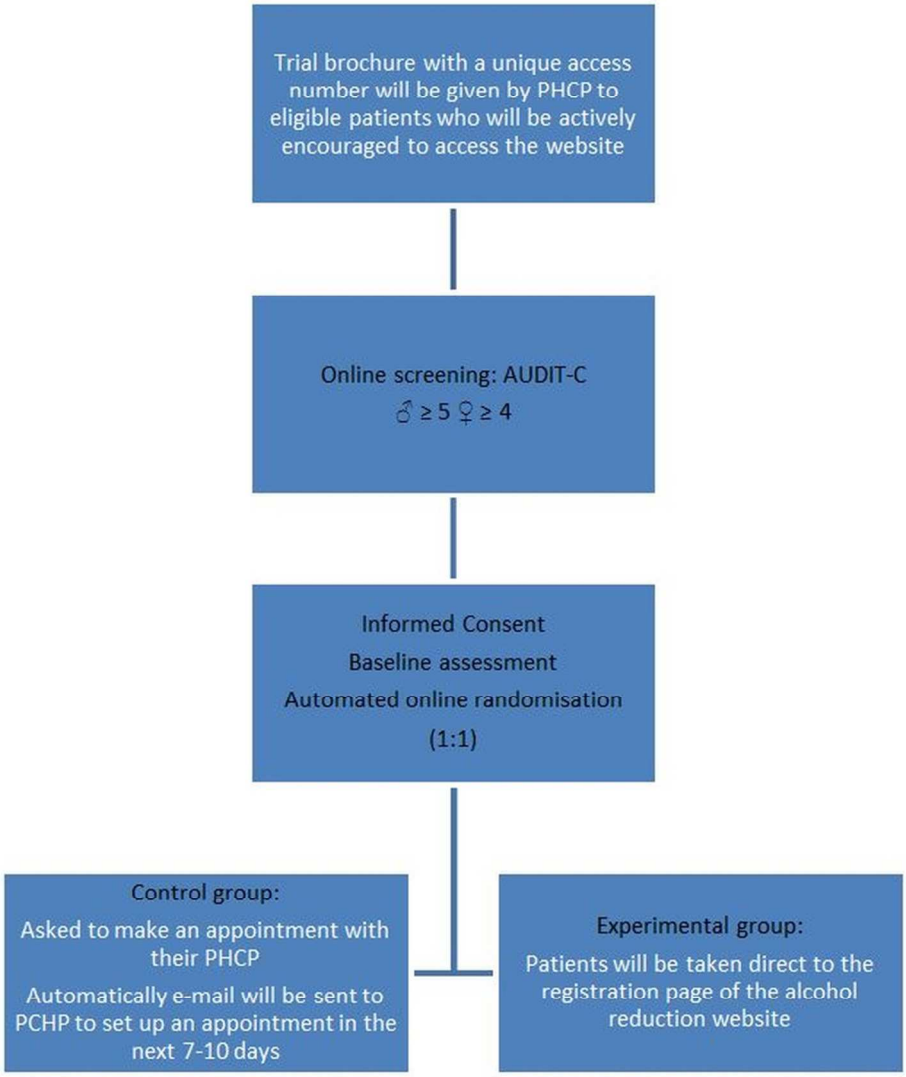

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