

MEETING ABSTRACTS

Open Access



Proceedings of the 16th annual conference of INEBRIA

Germany. 26–27 September 2019

Published: 26 September 2019

A1

Active components of a web-based personalised normative feedback: a dismantling study

Andre Bedendo^{1,2}, Jim McCambridge², Jacques Gaume³, Altay A. L. Souza⁴, Maria L. O. Souza-Formigoni⁴, Ana R. Noto⁴

¹Department of Psychobiology, Universidade Federal de Sao Paulo, Sao Paulo, Brazil; ²Department of Health Sciences, University of York, York, United Kingdom; ³Alcohol Treatment Centre, Lausanne University Hospital, Lausanne, Switzerland; ⁴Department of Psychobiology, Universidade Federal de Sao Paulo, Sao Paulo, Brazil

Correspondence: Andre Bedendo - andrebedendo@gmail.com
Addiction Science & Clinical Practice 2019, **14**(Suppl 1):A1

Background: Web-based Personalised Normative Feedback (PNF) show small to moderate effects on alcohol use among college students. However, little is known about its active components. This study evaluated the effectiveness of two components of PNF in reducing alcohol use and consequences among Brazilian college students.

Methods: College students (18–30 years) who reported alcohol use in the last three months ($N=5,476$), were included in a three-arm pragmatic randomised controlled trial with 1-, 3-, and 6-month follow-up. Participants were assigned to either: (1) full PNF intervention; (2) Normative feedback (NF) only or (3) Consequences Feedback (CF) only. The primary outcome was AUDIT score; secondary outcomes were number of alcohol-related consequences, drinking frequency, and typical/maximum number of drinks. We used Mixed Models with Multiple Imputation and Pattern-Mixture Model to account for attrition. Post-hoc analysis considered participant interest in knowing more about their drinking.

Results: Single component interventions reduced AUDIT score compared to full PNF, with significant effects for NF at 1-month ($b=-0.23$, $p=0.048$) and for CF at 3-month ($b=-0.33$, $p=0.03$). Compared to PNF, NF reduced the number of consequences at 1-month ($b=-0.16$, $p=0.001$) and drinking frequency at 3-month ($b=-0.42$, $p=0.03$), but increased the number of typical drinks at 6-month ($b=0.38$, $p=0.03$). CF reduced drinking frequency at 3-month ($b=-0.37$, $p=0.045$). Attrition models confirmed all results, except for the NF effect on typical drinks and drinking frequency. Post-hoc analyses indicated the superiority of single components effects among those students not interested in knowing more about drinking.

Conclusions: Findings suggest that individual components were superior to the full PNF intervention, however this effect was mainly driven by a minority of students (around 20%) who were not interested in receiving it.

Trial registration: NCT02058355.

A2

Optimising the alcohol reduction app, Drink Less

Claire Garnett¹, Susan Michie², Robert West¹, Matt Field³, Felix Greaves^{4,5}, Matthew Hickman⁶, Eileen Kaner⁷, Marcus Munafo⁸, Robyn Burton⁹, Matthew Walmsley⁹, Jamie Brown¹

¹Department of Behavioural Science and Health, University College London, London, UK; ²Department of Clinical, Educational and Health Psychology, University College London, London, UK; ³Department of Psychology, University of Sheffield, Sheffield, UK; ⁴Public Health England, London, UK; ⁵Department of Primary Care and Public Health, Imperial College London, London, UK; ⁶School of Population Health Sciences, University of Bristol, Bristol, UK; ⁷Institute of Health & Society, Newcastle University, Newcastle, UK; ⁸School of Psychological Science, University of Bristol, Bristol, UK; ⁹Public Health England, London, UK

Correspondence: Claire Garnett - c.garnett@ucl.ac.uk

Addiction Science & Clinical Practice 2019, **14**(Suppl 1):A2

Background: Drink Less is an evidence-based smartphone app for reducing excessive drinking in the UK. The development and initial evaluation of Drink Less followed the first two steps of the Multiphase Optimisation Strategy (MOST): (i) identification of intervention components and (ii) randomised factorial screening trial to evaluate the five individual components. The next step in MOST is to develop an optimised version of Drink Less.

Methods: The optimisation will be informed by three work packages. First, use of Bayes Factors to analyse additional data collected from extended recruitment of the randomised factorial screening trial. Secondly, an update of the 2017 Cochrane review on digital alcohol interventions and meta-regression of the intervention components associated with effectiveness. Thirdly, a content analysis of Drink Less user feedback received via emails and app store reviews.

Results: The Bayes Factors analysis of the factorial trial indicated that one of the five the intervention components ('Identity Change') should be removed in the optimised version of the app. The updated meta-regression of the Cochrane review indicated that 'Behaviour substitution' and 'Information about antecedents' should be introduced into an optimised Drink Less. The content analysis of user feedback identified high priority changes within existing components: customisable drink volumes; ability to update normative feedback; drinking calendar to start on Monday; bug fix relating to time zone changes; clarify how to edit drinks entries and how to navigate to the mood diary.

Conclusions: Using a mixed methods approach to optimise Drink Less has provided us with different insights: how to improve the likely effectiveness of the intervention and also providing users with what they want from the intervention, which is crucial for engagement with any intervention. This optimised version will undergo user testing to improve its usability and then the optimised version will be evaluated in a definitive trial.



Background: To implement brief intervention for unhealthy alcohol use, SPARC tested state-of-the-art implementation strategies—practice coaching, electronic health record (EHR) decision support, and performance monitoring and feedback—in 22 clinics of Kaiser Permanente Washington (KPW) from 01/15 to 07/18 using a stepped wedge design. Primary results showed that the intervention significantly increased EHR-documented brief intervention, but rates were very low (5%). This presentation uses data from a state-wide patient experience survey conducted in the middle of the SPARC trial to report on and compare rates of patient-reported receipt of brief intervention at sites surveyed before, during or after active implementation.

Methods: From 08/17 to 11/17, the Washington Health Alliance survey included questions assessing heavy episodic drinking (HED) and a question assessing receipt of alcohol-related advice (a key component of brief intervention). Sites were categorized into 3 groups, based on their randomly-assigned start date for the SPARC trial: those surveyed before, during or after implementation. For each group of sites, we calculated the percent of surveyed patients who reported alcohol-related advice (“% patient-reported brief intervention”) among those reporting any HED, and compared % patient-reported brief intervention at sites surveyed before, during and after implementation, using Chi-square and test for trend.

Results: Five sites were surveyed before SPARC implementation, 3 during and 13 after; % patient-reported brief intervention ranged 13.3% to 55.6% across sites. Rates of patient-reported brief intervention in groups of sites surveyed before, during and after implementation, respectively, were 40.9%, 47.9% and 39.2% (p-values for comparisons all > 0.05).

Conclusions: Although rates of patient-reported alcohol-related advice were higher than those based on EHR documentation, no differences in rates of patient-reported brief intervention were observed before during and after SPARC implementation. As in the main trial, results support further quality improvement efforts to ensure patients with unhealthy alcohol use receive brief intervention.

A16

Preliminary evaluation of a mobile-based Brief Intervention for hazardous drinkers in Goa-India

Danielle Fernandes¹, Abhijit Nadkarni², Richard Velleman³, Urvita Bhatia¹
¹Addictions Research Group, Sangath-Goa, Porvorim, India; ²Department of Population Health, The London School of Hygiene and Tropical Medicine, London, United Kingdom; ³Department of Psychology, University of Bath, Bath, UK

Correspondence: Danielle Fernandes - danielle.fernandes@sangath.in
Addiction Science & Clinical Practice 2019, **14**(Suppl 1):A16

Background: Hazardous drinking (HD) is a major public health problem in India. However, healthcare access is limited by the shortage of healthcare professionals. Extensive global evidence demonstrates the effectiveness of technology-delivered BIs in reducing alcohol consumption. Our study aims to increase healthcare access for HD, by designing a contextually-appropriate mobile-based BI, and evaluating its acceptability, feasibility, and preliminary impact.

Methods: Through a systematic review and in-depth interviews with experts and intended recipients, initial content areas for the intervention were derived. These were presented in a Delphi survey to 30 international experts, who rated each area on a five-point Likert scale. At the end of this two-stage iterative process, content areas that reached group consensus were synthesized to inform the intervention development. The draft intervention was then delivered in a case series to participants who screened positive for HD on the Alcohol Use Disorder Identification Test (AUDIT). At one-month follow-up, in-depth interviews were conducted to understand the acceptability and feasibility of the intervention. The preliminary impact was examined through changes in drinking parameters measured using the Timeline-Follow-Back (TLFB).

Results: 26 content areas were derived from the systematic review and interviews, and 22 of those met Delphi consensus. The intervention is currently being delivered in the case series, and findings on acceptability, feasibility and impact will be ready for presentation at

the conference. Preliminary follow-up interviews (n = 11) have indicated a preference for push messages and an app-based delivery. Higher number of messages was cited as an engagement deterrent, with three messages per week considered ideal.

Conclusion: The content and delivery of the intervention will be iteratively refined during the case series, and the final package will be pilot tested through a randomised control trial. If demonstrated to be effective, the intervention will change the landscape of interventions for HD in resource-constrained settings.

A17

Employment and living arrangement moderate the effectiveness of BI among university students

Paula V. Gimenez, Karina Conde, Raquel Peltzer, Mariana Cremonte
 Research Group on Psychoactive substances and injuries, Institute of Basic Psychology, Applied and Development of Psychological Technology (IPSIBAT), National Scientific and Technical Research Council (CONICET), National University at Mar del Plata (UNMDP), Buenos Aires, Argentina

Correspondence: Paula V. Gimenez - gimenezpv@hotmail.com
Addiction Science & Clinical Practice 2019, **14**(Suppl 1):A17

Background: Although BI has shown to be effective among university students in high income countries, little research has been done in Latin-America. Furthermore, evidence examining moderators of intervention efficacy is scarce. Certain characteristics that make alcohol more easily available to students, such as living outside of parental control or having economic autonomy to spend money on alcohol, could moderate BI effectiveness. The objective of this study is to evaluate the moderator role of the living arrangements and the employment situation on BI effectiveness.

Materials and methods: Participants were 473 students from Mar del Plata National University (60% women, 40% men; between 17 and 46 years old (M = 20.34, SD = 3.9)). Prospective participants were screened and those with high-risk alcohol consumption in the last 12 months were randomly assigned to a control group or BI. After 3 months, they were re-assessed. The measures were: effectiveness (i.e. decrease in AUDIT scores (yes/no)), employment situation (work: yes/no) and living arrangements (living with family: yes/no). Fisher's exact test was used to analyze the moderator effects of living arrangements and employment situation on effectiveness. Logistic regression analyses were performed in order to control the possible effect of age.

Results: 76% of students lived with their families, while 24% lived alone or with friends; 42% of the students were employed. Living with family moderated (increased) BI effectiveness (9,310, p = 0.01). Similarly, not having employment (i.e. being supported by family) also moderated (increased) BI effectiveness (7,611, p = 0.02). These moderator effects were not accounted for by age.

Conclusions: Living arrangement and employment moderated effectiveness of BI, suggesting that restricted access to alcohol may improve the effectiveness of interventions among university students.

A18

Who are the users of the Brazilian self-help intervention program “Beber menos” (drink less) who accepted to participate in a RCT to evaluate its effectiveness?

Maria Lucia O. S. Formigoni¹, André L. M. Andrade², Fabricio Landi-Moraes³, Gabrielle A. Cunha⁴

¹Departamento de Psicobiologia, Universidade Federal de São Paulo, São Paulo, SP, Brazil; ²Faculdade de Psicologia, PUC-Campinas, Campinas, SP, Brazil; ³Departamento de Informática em Saúde, Universidade Federal de São Paulo, São Paulo, SP, Brazil; ⁴Departamento de Psicobiologia, Universidade Federal de São Paulo, São Paulo, Brazil

Correspondence: Maria Lucia O. S. Formigoni - mlformig@gmail.com
Addiction Science & Clinical Practice 2019, **14**(Suppl 1):A18

Background: The World Health Organization supported researchers from four countries (Belarus, Brazil, India, and Mexico) in the development of an e-health self-help six-week intervention to reduce alcohol