The Effect of a Brief Intervention for Problem Gamblers - a Randomized Controlled Pilot Trial

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Study protocol

Background

The prevalence rates for problem gambling (PG) in Sweden remains the same despite the fact that the gambling participation declines. According to the latest prevalence survey on PG in Sweden, approximately 2% of the adult Swedish population suffer from PG. Further, 5% are at risk of developing PG (1,2). PG is hallmarked by an inability to stop or reduce gambling even though it affects several life domains, such as: personal finances, family relationships, the physical and mental health and work in a negative way (3). Despite the fact that there are treatments that work, only around 5% of the individuals in need of treatment seek help within the healthcare system (1). There is also an extensive overlap between PG and especially alcohol, depression and anxiety disorders (4–6). Given the fact that few gamblers in need of treatment actually seek help within the healthcare sector, it is urgent to develop and evaluate interventions with a low threshold to participate.

Treatment outcome research

Internationally, there is a growing body of research on psychological treatments for PG. To this date, cognitive behavioural therapy (CBT) delivered face-to-face, has yielded the strongest support, but the evidence level is still considered low (7). There is also some support for brief motivational enhancement interventions, usually delivered via telephone, consisting of an initial counselling session based on Motivational Interviewing (MI) aligned with additional support consisting of written self-help material and/or booster sessions via telephone (8–10). A few studies have evaluated the effects of online CBT for problem gamblers, showing promising results (11,12). Overall, there is a growing body of evidence supporting the effects of Internet delivered CBT-interventions (13). Further research on psychological treatments for PG is needed.

Gambling helplines

A natural entry point for individuals suffering from PG in Sweden is the Swedish National Gambling Helpline, the helpline. The helpline offers anonymous support and counselling to gamblers and concerned significant others (CSOs) via telephone, chat or email. The helpline also offers online screening of gambling habits with personalised feedback, and self-directed online help. On an annual basis about 1200 gamblers and 1000 CSOs contact the helpline for counselling and support. Approximately 3500 gamblers screen their gambling habits online and 1200 registers for the self-directed online help (14).

In an international context, gambling helplines have been around for decades, but to our knowledge only one evaluation of its effectiveness has been conducted, compiled as a report to the New Zeeland Ministry of Health. At the New Zeeland gambling helpline, four different interventions were tested: 1) the regular counselling, 2) one MI-session, 3) one MI-session plus written self-help material, and 4) one MI-session, written self-help material and up to four booster counselling sessions. The authors were not able to show superiority of any intervention, but at a sub-group level they found that gamblers experiencing greater problem

gambling severity, greater levels of depression and anxiety and who were consuming alcohol at an "at-risk"-level benefitted from the most extensive intervention (15).

Given the fact that the Swedish gambling market has undergone a major transformation over the last decade - from being mainly a land-based market to predominantly being an online gambling market (16), and the fact that almost all Swedish citizens have access to the Internet, and the growing support for Internet delivered CBT-interventions - the natural development of offering written self-help materials and/or booster sessions in connection to an initial counselling session in a gambling helpline is to offer the extended contact as a brief online CBT-intervention. A study at the Australian gambling helpline discovered that the gamblers were primarily in need of practical tools on how to manage their gambling, rather than help enhancing their motivation to change (17). CBT provides concrete tools for changing the gambling habits.

Aims

The aim is to test the feasibility of a brief online CBT-intervention at the Swedish national gambling helpline's counselling service, more specifically: pilot-test of a short online CBT-program in connection to an initial counselling session at the gambling helpline.

Method and materials

Design

A pragmatic randomized controlled pilot trial examining feasibility of an additional brief online CBT-program in connection to an initial counselling session in the helpline. The study participants will, after an initial counselling session with the helpline, be randomized to either a brief online CBT-program or to log their gambling habits for six weeks.

Outcomes

The main outcome is feasibility of conducting the study, secondary outcomes are net losses to gambling, days gambling, problem gambling severity level, gambling urges, self-efficacy in gambling situations, psychosocial health and general social functioning.

Participants

Study participants will be recruited from the helpline's counselling service and webpage. Gamblers' scoring above 3 points on the PGSI scale are eligible for inclusion. Other inclusion criteria are:

- Aged over 18 years
- Good enough skills in the Swedish language
- Access to the Internet

Exclusion criteria are:

- Being involved in a treatment research study the previous 3 months

- Receiving other treatment for PG
- Being on a non-stable drug treatment for any psychiatric disorder
- Showing signs of severe depression

Randomization

Participants will be randomized using block randomization with varying block sizes (ranging between 2 to 8 participants per block) to ensure balanced groups.

Data collection

Data will be collected at baseline, weekly during the treatment, after the treatment, and 6 weeks after the end of treatment.

Intervention

The internet-based CBT program that is the intervention in the study is developed by the research group and is based on CBT treatment for problematic gambling (see 18). The program have elements of psycho-education, functional analysis on gambling situations, behavioural activation, reflections on thoughts about gambling and relapse prevention, and basically the same motivational increasing principals that is used in the Motivation Interviewing (MI) method. The program consists of four modules that are given during six weeks (week 1, 2, 4, and 6 after randomization). Each module has its own team with text to read and exercises. When a module is completed, the participants receive feedback from a counsellor via a messaging system in the web platform. The feedback aims to highlight and strengthen the client's self-determination and own ability to change their behaviour. In the last module, the progress made and tips for further support are summarized. Themes for the four treatment modules are as follows:

Week 1: Objective of treatment, psycho-education, functional analysis on gambling

Week 2: Functional analysis on gambling situations, thoughts on gambling and behavioral activation

Week 4: Behavioural activation and functional analysis on gambling-free activities

Week 6: Relapse plane: to maintain a gambling-free life with focus on handling risk situations and engage in gambling-free activities.

The ordinary counsellors at the helpline will be the counsellors in the study and will be educated in the CBT method before the study starts. They all have a long experience to work with persons who are problematic gamblers and they will receive continuous supervision by a certified psychologist. The written feedback given to the counsellors will be reviewed to ensure that the treatment is given according to the CBT method.

Statistical analyses plan (SAP)

Feasibility will be analysed using mainly descriptive statistics. To analyse the longitudinal data a three-level regression model will be used. The highest level in the hierarchy consists of the therapist, the second level is the client and at the lowest level are the repeated measurements made on the clients. The main outcome in the longitudinal part of the study will be net losses, and based on earlier knowledge it is known that this outcome have a distribution that is far from a normal distribution. It has a distribution with high peaks at both ends of the measured values. Therefore, the regression models used to analyse the longitudinal data will not be linear models but rather zero-inflated or alternatively hurdle models based on either a Poisson distribution or a negative binomial distribution.

Ethical considerations

Since the patient group is fairly new and society's help is limited, there is a risk that patients with too extensive need of support apply to participate in the intervention study. To make sure that no one is left without help, participants who for any reason are excluded from the study will be referred to help in their vicinity. The helpline has a record of addiction and psychiatric care to all of Sweden's municipalities and county councils.

Further, participants will be systematically followed up within the study, which enables the research group to have a constant supervision of the treatment process. Participants who are still experiencing problems after intervention termination will be referred to help in their vicinity.

Participants who end the intervention without telling, will be contacted via telephone up to 3 times to check further participation, and will, if necessary, be offered a referral to further treatment. Deviations will be reported in the participant's paper journal. Personal data will be handled according to the Swedish Data Protection Act.

In previous outcome studies participants have benefitted from the treatment they have received. It is likely to believe that those who participate in the study will benefit from the intervention. It is also likely to believe that future problem gamblers will benefit from the study.

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