Title:
The context of gambling treatment: towards creating an online service to reduce problem gambling.

Dec 11, 2018

ID: 074-2018

Detailed Background and Rationale For Part 5

This study proposes to test the feasibility of an online implementation of problem gambling treatment as a means of reducing barriers to treatment. However this study is not a clinical study. It will assess the feasibility of on line treatment for problem gambling by assessing problem gamblers' interests in an online treatment program, develop best practice guidelines for online treatment, develop a pilot implementation of on line treatment, and then evaluate the uptake and efficacy of an online treatment program for problem gambling. Only a small percentage of people who suffer from problem gambling enter treatment. Studies have shown that there are many barriers to treatment for problem gamblers (Boughton & Brewster, 2002; Boughton, et al., 2017 a; 2017b).

Although treatment services are widely available in Ontario, there are limitations, such as lack of daycare, shift work, long distance travel, and mobility and sensory disabilities, which make it difficult for some people to attend treatment. The typical problem gambler often works multiple jobs to make up for the financial losses brought about by their gambling making it difficult to attend treatment. Problem gambling is prominent in regions that are rural or remote and far from treatment centers. Parents with young children may not be able to find or afford childcare to attend inperson treatment. People with disabilities face mobility, transportation and communication challenges. Other people simply lack, or cannot afford, transportation. Statistics also show that problem gamblers experience stigma and shame about their addiction. An online treatment service would mitigate these barriers by meeting the needs of many people suffering from problem gambling, in the context in which they live. Additionally, Ontario is now offering online gambling and as a result the availability of gambling across the province has greatly increased, but accessibility to treatment remains spatially defined to bricks and mortar buildings. To fill this gap, we propose to examine the possibility of an internet based treatment service that would be available to problem gamblers and would be accessible from anywhere in the province. An internetbased service would meet people where they are: anyone with an internet connection would be able to access services; others who do not have a home internet connection would be able to access the service with a smart phone or from an internet cafe.

This project operates within the context of a gambler's life and meets them where they are rather than expecting them to come to treatment services. The first part of the study will involve gathering knowledge about the evidence related to online treatment and the needs for an online service. This step is a fundamental part of ensuring that we would be providing problem gamblers with a service that addresses barriers to treatment that is accessible from anywhere in the province without the need to attend traditional treatment services.

The combination of a literature review, focus groups and key informant interviews will allow us to create best practice guidelines for the delivery of an internet based problem gambling service. In the second year, the study will develop an online service that incorporates the evidence and meets the needs identified in the first part of the study. We will then be in a position to conduct a proof of concept that will demonstrate if the online service reduces barriers and meet the needs of problem gamblers. We will hire treatment professionals to help guide the development, as well as IT specialists to create an interactive website. This website will also be associated with our existing selfhelp website but will provide additional services based on what was identified in

year one, potentially including individual and group online counseling sessions. Instead of simply describing the best practice, in the third year we will conduct a pilot implementation of the online treatment service to evaluate its uptake and impact.

This pilot service will be promoted across the province so that a broad range of specialized and allied professionals are aware that it is available and can refer their clients to it. The results of the study will be shared with Ministry of Health and Long Term Care policy makers, and other provincially mandated organizations, which would help inform decision making about delivery of counselling services for people affected by problem gambling or other disorders.

Participants: an estimated 100 clients (those who identify with problem gambling concerns) will be recruited to participate in the project. The clients will be recruited via the internet, and through advertisements placed on the OLG website, the CAMH website, banner advertisements and other strategies.

Due to professional, hospital and funding regulations, clients of the service will need to be registered patients of CAMH. This requirement will mean that the service will not be anonymous and prospective clients will need to provide identifying information, such as their OHIP number.

Outline recruitment strategy

Add will be placed on line, the play smart centres at the casinos, and at CAMH. Only new clients (ones currently not in treatment) will be included. Participants' interested and ability to commit to the study will be initially screened by telephone to preliminary assess entry criteria. Participants meeting entry criteria will continue in the study, otherwise they will be disimpanelled and referred to an appropriate healthcare practitioner. The online treatment program will not be a firstline crisis service given the limitations of the pilot and the existence of crisis services already in the community. Therefore, a screening process will be required to assess whether the online service is suitable for a prospective client before the person is registered.

If it is determined that a prospective client is not suitable, they will be provided with resources for other services that may be more suitable, such as 911, a local hospital emergency department, Connex Ontario, or a distress line. Another option is prerecorded meditation guides that will be available for streaming from our website. Selfhelp materials will also be available at all times.

Participants who are registered in the service will be asked to read a consent form and to create a username and password to access the service. They will then complete intake questionnaires online. Services will be provided to them on a drop down online menu.

Evaluation Framework:

Part 1- initial pilot with atleast two treatment providers and two program participants
-process evaluation with program participants
-process evaluation with treatment providers

Process evaluation questions will include:

-How did you find the online treatment program?
-What were the strengths and weaknesses of the online treatment program?
-How would you describe the impact of the program?
-to what extend does the online treatment program have merit or worth?
-in what ways (if any) does the online treatment program mitigate barriers to face to face treatment? (e.g. list barriers)
-in what ways (if any) could the online treatment program be improved?

Treatment provider questions (in addition to the above)
-Describe the overall treatment program in relation to how you have typically provided gambling treatment
-How would you describe participant reactions?
-what are your perspectives on the best practice treatment protocols and training for online treatment?

Responses to the above questions will be considered and changes/feedback will be implemented into the online treatment program with feedback from atleast two treatment providers and two program participants. A rigorous evaluation will be completed simultaneous with participation in the program and the procedures are discussed in greater detail below.

Part 2: Implementation of program and evaluation
Initial screening with researcher by phone to evaluate suitability for study at the onset of program. Those who fit the exclusion and inclusion criteria will be directed to an secure online survey where they will sign a consent form, complete a number of surveys, and then enter contact information in order to receive a gift certificate as a thankyou.

Study protocol:

Participants will undergo pre-treatment baseline assessments of all outcome variables (see below) which will include online measures, and semi-structured interviews. Participants will participate in an online PG treatment program that is modeled on the existing problem gambling treatment offered at CAMH, but will also make use of the gambling self help tools available on the CAMH web site. Online group treatment will consist of 8 weekly 90-minute group treatment. Outcome measures will be acquired at baseline (week 1) mid-treatment (week 4) and final session (week 8). Follow-up of all outcome measures will also occur online at 4, 8 and 12 months after completion of online gambling treatment program.

After the completion of each online treatment session, participants will complete the outcome and a session rating scale (Boughton, et al., 2017a, 2017b).

The researchers will conduct semi structured phone interviews with program participants at conclusion of the study to understand outcomes and satisfaction with online treatment program.

Online Problem Gambling Treatment:

The 8-week online program will consist of weekly 90-minute group therapy sessions. The treatment model will incorporate the self-help problem gambling tools and worksheets reflective of problem gambling treatment and cognitive behavioural therapy (edit this).

The treatment sessions will provide opportunity to review gambling treatment goals, include a teaching and reflective component and opportunity for sharing, reflection and discussion with peers. The online sessions will be instructive and collaborative in nature.

Treatment providers will be required to keep a detailed reflective journal (need to design this) regarding strengths, difficulties and overall reflections of the program. Treatment providers will also note any barriers or problems with participant compliance, performance or technical issues with the program and will work collaboratively with the research team and participants to address issues as they arise.

PG treatment program:

The therapy will be conducted by counsellors currently working at with problem gambling clients at CAMH. The treatment will be a modified version of standard treatment offered over the internet. The problem gambling treatment program will be based on educational and process elements of therapy with each session allowing an opportunity to learn about a particular topic related to gambling with an opportunity for discussion and integration of the learning materials. The treatment protocol will include topics of: what is problem gambling, risk factors, signs of problem gambling, effects of problem gambling, high and low risk gambling, information about games, what are the odds etc.. In particular, the treatment will involve the standard treatment Skills for Change that has been adapted for an online setting. It will consist of 2 individual session and 8 group sessions.

Each online group session will typically include the following structure:
-check in
-educational component (led by service provider)
-reflection and discussion on topic
-check out
-completion of outcome and session rating scale

The treatment providers will be already practicing clinicians at the PGIO (professional accreditation?)

Method

To evaluate the project we will use both qualitative and quantitative measures to evaluate the project using a before and answer evaluation.

Inclusion criteria: problem gamblers seeking treatment; must be willing to have therapy conducted through internet

Exclusion criteria: not pathological gamblers, no current suicidal ideation, no acute psychotic symptoms, no current involvement in other gambling treatment, no severe substance abuse problem or severe mental health problem (as assessed by screening tools).

Quantitative Measures
The project would be evaluated based on: (1) the number of clients who sign up; (2) how long the clients remain in the program; (3) a short feedback questionnaire after each session; (4) feedback questionnaires after one month of treatment and after four months; (5) feedback questionnaires to assess practitioner and referral source satisfaction in the delivery of the service; (6) prepost analysis of improvement in their scores on the Kessler, the REKT, PSS scale, QLI, and the PGSI; and (7) a comparison of their outcome to their treatment goals.

Quantitative measures: (will be available for participant completion online through REDCAP):

1. Demographics (age, location, prior gambling treatment, typical gambling behaviour (what, frequency etc.).
2. Gambling behavior, help sought, cravings to gamble (there were in the original survey proposal).
3. Problem Gambling Screening Index (PGSI) (Ferris & Wynne, 2001). Kessler 6 scale of psychological distress (Galea, et al., 2007.).
4. Added a single question about traumatic brain injury because recent studies have shown this to be associated with problem gambling (Mann, et al., 2017).
5. Quality of Life InventoryQLI used by Focal research in our previous research.
6. Perceived Social Support (PSS) (Zimet, Dahlem & Farley, 2010).
7. Erroneous beliefs The REKT (Turner, et al., 2006) with 10 additional items.
8. Mindfulness Attention Awareness Scale (

These measures will be completed at baseline, at the end of therapy, and 6 months after program completion.

At the conclusion of each session of the online treatment program, participants will complete the outcome and session rating scale (See Boughton, et al., 2017a; 2017b).

-Treatment providers will be asked from the onset of the study to keep a detailed reflection log which will be distributed to participants at the onset of the study and highlighting particular areas to assess and reflect on (need to create a model of what this might look like)

Qualitative measures:
At program completion, researchers will conduct semi-structured phone or online interviews with program participants and treatment providers to gain information regarding the following questions:
-How did you find the online treatment program?
-What were the strengths and weaknesses of the online treatment program?
-How would you describe the impact of the program?
-to what extend does the online treatment program have merit or worth?
-in what ways (if any) does the online treatment program mitigate barriers to face to face treatment? (e.g. list barriers)

-in what ways (if any) could the online treatment program be improved?

Treatment provider questions (in addition to the above)
-Describe the overall treatment program in relation to how you have typically provided gambling treatment
-How would you describe participant reactions?
-what are your perspectives on the best practice treatment protocols and training for online treatment?
Specific outcome evaluation questions will include:

- Did the program succeed in helping people with problem gambling? How?
- Were the treatment protocols and manuals effective for treatment providers?
- Was the program more successful with certain groups of people than with others?
- What aspects of the program did participants find gave the greatest benefit?
- What are areas of improvement for the online PG treatment program?

Data Analysis

A time series design will be used to examine the effects of the online problem gambling treatment program through repeated measurement before, during (week 4), and after the intervention (week 8). Participants will also complete all the quantitative measures at 4 months, 8 months and 12 months after treatment completion. Measures will be completed online. Open-ended questions will also be part of the online questionnaire and will include questions about gambling behaviour, social supports, quality of life etc.

In this design, each participant also serves as own control so the variability between participants becomes isolated and analysis can focus more precisely on the effects of the intervention. The effects of the treatment will be determined using evidence from both quantitative and qualitative data sources. Quantitative and qualitative data will be gathered and analyzed in parallel to generate an understanding of how the treatment is viewed by both treatment providers and treatment recipients. Emerging trends and change over time will be analyzed. Qualitative data will be analyzed using grounded theory methodology to enable participants to share their experiences and perspectives of the program. Emerging themes will be summarized and discussed. Similar methodology will be utilized for analysis of treatment provider reflection journals. Treatment providers will keep attendance records for the online treatment program nad will also keep notes on participant tolerance and compliance with treatment.

Power

A power analysis indicated that 100 participants has 84% power to detect a fairly small difference of d = .3 within groups comparing pre and post test scores using repeated measures t-tests. To control for experimentwise error at the .05 we will use a multivariate analysis to determine if the overall impact of the program produced an overall improvement in the client scores (rather than a tradeoff between variables). In addition, the sample size has sufficient power to detect correlations of .3 with 86% power.

References

Aas IM. (2011). Guidelines for rating global assessment of functioning (GAF). DOI: 10.1186/1744-859X-10-2

Boughton, R. R., Jindani, F., & Turner, N. E. (2017). Closing a Treatment Gap in Ontario: Pilot of a Tutorial Workbook for Women Gamblers. Journal of Gambling Issues, 36, 199-231.

Boughton, R. R., Jindani, F., & Turner, N. E. (2016). Group Treatment for Women Gamblers Using Web, Teleconference and Workbook: Effectiveness Pilot. International Journal of Mental Health and Addiction, 14(6), 1074-1095.

Boughton, R., & Brewster, J. (2002). Voices of women who gamble in Ontario: A survey of women's gambling, barriers to treatment and treatment service needs: Ontario Ministry of Health and Long Term Care.

Brown, K.W., & Ryan, R.M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology, 84*, 822–848.

Canty-Mitchell, J. & Zimet, G.D. (2000). Psychometric properties of the Multidimensional Scale of Perceived Social Support in urban adolescents. American Journal of Community Psychology, 28, 391-400.

Dennis, M. L., Feeney, T., Stevens, L. H. (2006). Global Appraisal of Individual Needs–Short Screener (GAIN-SS): Administration and Scoring Manual for the GAINSS Version 2.0.1. Bloomington, IL: Chestnut Health Systems. Retrieved on [insert date] from http://www.chestnut.org/LI/gain/GAIN_SS/index.html. http://www.chestnut.org/LI/gain/GAIN_SS/index.html.

Ferris, J., & Wynne, H. (2001). The Canadian problem gambling index: Final report. Submitted for the Canadian Centre on Substance Abuse http://www.problemgambling.ca/EN/ResourcesForProfessionals/pages/problemgamblingseverityindexpgsi.aspx

Frisch, M. B., Clark, M. P., Rouse, S. V., Rudd, M. D., Paweleck, J., & Greenstone, A. (2005). Predictive and treatment validity of life satisfaction and the Quality of Life Inventory. Assessment, 12(1), 66-78.

Galea, S., Brewin, C.R., Gruber, M., Jones, R.T., King, D.W., King, L.A., et al., 2007. Exposure to hurricane-related stressors and mental illness after Hurricane Katrina. Arch Gen Psychiatry 64(12), 1427-1434.

Mann, R.E., Turner, N., McCready, J., Hamilton, H., Elton-Marshall, T., Rehm, J. and Kurdyak, P. (2016) Social determinants of problem gambling in the Ontario population: Risk and protective factors. Report submitted to the Ontario Ministry of Health and Long Term Care.

Turner, N., Littman-Sharp, N., & Zangeneh, M. (2006). The experience of gambling and its role in problem gambling. International Gambling Studies, 6, 237-266.

Zimet, G.D., Dahlem, N.W., Zimet, S.G. & Farley, G.K. (1988). The Multidimensional Scale of Perceived Social Support. Journal of Personality Assessment, 52, 30-41.

Zimet, G.D., Powell, S.S., Farley, G.K., Werkman, S. & Berkoff, K.A. (1990). Psychometric characteristics of the Multidimensional Scale of Perceived Social Support. Journal of Personality Assessment, 55, 610-17.