Evaluation of effectiveness of the Unplugged program on gambling behaviours among adolescents: study design and population of the experimental controlled study "GAPUnplugged"

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Abstract

Background: Gambling risk behaviour is an emerging problem among adolescents. Early onset of gambling behaviour poses a risk for development of problematic gambling and other risk behaviours later in life. Previous studies showed some effects of gambling prevention interventions in reducing gambling behaviours among adolescents, however scarce studies were implemented on early adolescents. The "Unplugged" program is an effective Social Influence curriculum for reducing substance use behaviours among students. In 2022/2023 school year, we conducted an experimental controlled study aimed to evaluate the effectiveness of a new component focused on gambling added to the Unplugged program in preventing gambling behaviours among secondary school students. The present paper aims to describe the study design and the study participants of the experimental controlled study "GAPUnplugged".

Methods: Secondary schools of Piedmont region and Rome city were invited to participate in the study. The schools accepting to participate were allocated to intervention and control arms. The inclusion criteria for intervention arm were at least one class teacher already trained for the implementation of the Unplugged program, availability of the class teacher to implement the new

component on gambling, and participation of the class teacher to a 2-hours training session focused on the new contents on gambling. A self-completed anonymous questionnaire including questions on socio-demographic characteristics, addictive behaviours, beliefs, attitudes and risk perceptions about gambling, normative perceptions, parental practices, school climate, refusal skills; impulsiveness, self-esteem, antisocial behaviours and sensation seeking was prepared for baseline and follow-up surveys. Before the administration of questionnaires, information on the study was provided to the pupils and parental consent to participate was asked. The protocol of the study was submitted and approved by the Novara Ethical Committee and registered in ClinicaTrials database. The baseline questionnaires were administered between November 2022 and January 2023 both in control and intervention group. Afterwards, the intervention group received the 13 units of the "Unplugged" program with the gambling component, for about 3 months (February-April 2023). Finally, after 4 to 8 weeks from the completion of the program, the same evaluation questionnaire was administered in control and intervention classes (May-June 2023).

Results: Twenty-nine schools accepted to participate in the study. Sixty-three classes (1325 students) satisfied the eligibility criteria for intervention arm, and the other 61 (1269 students) were allocated to the control arm, for a total of 124 classes and 2594 students. At baseline, 998 students of 59 classes in the intervention arm and 876 students of 59 classes in the control arm filled the questionnaire (1874 students on overall, of 118 classes). The analyses are ongoing.

Conclusions: This is the first study designed to evaluate the effectiveness of a new gambling unit added to the "Unplugged" school-based universal curriculum. Moreover, this appears to be the first experience of evaluating a new component focused on a different risk behaviour, added to a curriculum previously shown as effective on other risk behaviours. Results of the evaluation will be useful to clarify the effectiveness of school-based prevention programs in reducing gambling behaviours among early adolescents.

Keywords

Study design, experimental controlled trial, students, Unplugged, prevention, gambling