

## Oxytocin effects on human aggressive responding



Joseph L. Alcorn, Nadeeka Dias, N. Rathnayaka, Joy Schmitz, C. Green, Scott D. Lane

*Department of Psychiatry & Behavioral Sciences, School of Medicine, Program in Neuroscience, Graduate School of Biomedical Sciences, University of Texas Health Science Center – Houston, Houston, TX, United States*

**Aims:** In the search for interventions aimed at improving the social functioning of individuals with substance use disorders (SUD), the neuropeptide oxytocin (OT) and the oxytonergic system may hold promise as an intervention strategy for promoting prosocial behaviors. Acute administration of OT has been shown to increase cooperation, trust, and generosity adult humans. These behaviors are labeled prosocial and stand in contrast to aggression, which may be considered antisocial. In addition to prosocial effects of OT administration, OT dose has been shown to facilitate social cognition in individuals with disorders characterized by deficits in social behavior and cognition. Individuals with a history of SUD have higher rates of aggressive behavior and a direct effect of OT dosing on human aggressive behavior has yet to be clearly experimentally demonstrated, this study seeks to examine the potential impact of OT on aggressive behavior in humans. The primary hypothesis is that acute administration of OT dose will decrease human aggressive behavior.

**Methods:** In this ongoing study, subjects participate in a within-subjects repeated measures design. All subjects receive placebo and 24 international units of OT. Human aggression is measured using the Point Subtraction Aggression Paradigm (PSAP), a laboratory method with demonstrated sensitivity to acute drug effects. Dependent measures include the rate of aggressive responding on the PSAP and clinically relevant personality traits to examine possible associations with OT response.

**Results:** Currently, we have completed eight subjects. Preliminary analyses indicate a positive association between OT-mediated changes in aggressive response rate and pathological personality traits.

**Conclusions:** Individual differences in response to acute OT administration appear to be related to level of trait aggression and/or pathology, providing clinical implications for use of OT in individuals with SUD.

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## Evaluation of the effectiveness of drug prevention programs: Analysis of the international scientific production (2002–2011)



Rafael Aleixandre-Benavent<sup>1</sup>, Daniela Ribeiro Schneider<sup>2</sup>, Francisco Bissoli Jr.<sup>2</sup>, Máxima Bolaños-Pizarro<sup>1</sup>, Francisco J. Bueno Cañigral<sup>3</sup>, José C. Pérez de los Cobos Peris<sup>4</sup>

<sup>1</sup> *Unidad de Información e Investigación Social y Sanitaria, IHMC López Piñero (CSIC – Universidad de Valencia), Valencia, Spain*

<sup>2</sup> *Núcleo de Pesquisas em Psicologia Clínica PSICLIN, Departamento de Psicologia, Universidade Federal de Santa Catarina, Florianópolis, Brazil*

<sup>3</sup> *Plan Municipal de Drogodependencias, Concejalía de Sanidad y Consumo, Ayuntamiento de Valencia, Valencia, Spain*

<sup>4</sup> *Servicio de Psiquiatría, Hospital de la Santa Creu y Sant Pau, Barcelona, Spain*

**Aims:** The objective was to analyze the international scientific production in the period 2002–2011 of articles that assess the effectiveness of drug use prevention programs by means of bibliometric methods through the Web of Knowledge and Scopus databases.

**Methods:** We perform bibliographic searches in the Web of Knowledge and Scopus databases. We use bibliometric methods to identify the scientific production and collaboration.

**Results:** The number of selected articles was 253, with a progressive evolution of the number of published articles during those 10 years, from 21 in 2002 to 38 in 2011. The articles have 942 different authors, where 819 (86.94%) published a single paper. The average number of authoring was 4.55, which indicates the degree of collaboration. The top four productive institutions are American, with more than 10 published articles about this topic, and some European institutions. The Latin America production was lower. Most of the production (237, 94%) was published in English and only 14 in other languages (9 in Spanish, 4 in German, 2 in Slovakian and 1 in Portuguese).

**Conclusions:** The results show that collaborations are like a threesome shape, with one country from North America, an European country and a third country from another continent), demonstrating that international scientific collaboration in the area have multiple networks and profiles. This is the case of the United States, representing the core of most of the networks.

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## Gambling behavior among gamblers with and without attention deficit/hyperactivity disorder



Jean-Marc Alexandre<sup>1,2</sup>, M. Fatseas<sup>1,2</sup>, G. Bouju<sup>2</sup>, C. Legauffre<sup>2</sup>, M. Valleur<sup>2</sup>, D. Magalon<sup>2</sup>, I. Chereau-Boudet<sup>2</sup>, M. Gorsane<sup>2</sup>, Marc Auriacombe<sup>1,2</sup>, J. Hardouin<sup>2</sup>, J. Venisse<sup>2</sup>, M. Grall-Bronnec<sup>2</sup>

<sup>1</sup> *Addiction Treatment Center, Univ. Bordeaux/CNRS USR 3413, Bordeaux, France*

<sup>2</sup> *Gambling Cohort Group, Univ Nantes, Nantes, France*

**Aims:** Previous studies showed that Substance Use Disorder (SUD) and Attention Deficit/Hyperactivity Disorder (ADHD) often co-occur. However, few studies have investigated relationships between ADHD and gambling disorder. The aim of this study was

to assess the characteristics of gambling among gamblers with and without ADHD.

**Methods:** 599 gamblers (66% males, 43 y.o.) were recruited in addiction clinics and gambling places in France. Subjects were interviewed with standardized questionnaires to assess ADHD symptoms in childhood and adulthood, gambling characteristics (gambling habits, DSM-IV criteria for pathological gambling, gambling severity, and related cognitive distortions) and psychopathology.

**Results:** 20.7% ( $n=124$ ) of gamblers presented a lifetime or current ADHD. Exhibiting ADHD was associated with a greater risk to exhibit problem gambling, with a higher severity of gambling-related problems, to exhibit cognitive distortions related to gambling, and psychiatric comorbidities ( $p < .0001$ ).

**Conclusions:** ADHD was highly prevalent among gamblers, and it was associated with more severe gambling disorder. Improving ADHD screening among gamblers would improve the treatment of gambling disorder.

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### Cannabis use among women and during pregnancy



Fares Alharbi<sup>1,2</sup>, N. El-guebaly<sup>3,4</sup>

<sup>1</sup> King Abdulaziz Medical City, Riyadh, Saudi Arabia

<sup>2</sup> King Saud bin Abdulaziz University for Health Sciences, Riyadh, Saudi Arabia

<sup>3</sup> University of Calgary, Calgary, AB, Canada

<sup>4</sup> Alberta Health Services, Calgary, AB, Canada

**Aims:** Exploring the potential management of cannabis among women and during pregnancy, an expanding public health issue.

**Methods:** A Medline search from 1980 to 2013 for articles highlighting drug abuse among women and during pregnancy, with particular emphasis on cannabis/marijuana use during pregnancy, delivery and its management as well as the drug impact on the fetus.

**Results:** Cannabis is the most commonly used illicit drug among youth and pregnant women in western societies. Historically, cannabis has been used to alleviate nausea during pregnancy. In reviewing the literature on the use of medication as well as psychosocial approaches in women and pregnancy, clinical guidelines emerge as well as a research agenda including prevalence estimates through urine screening. The implication of a positive test should not be punitive. Clinical trials on pregnant samples should also be conducted. The impact of THC and other cannabinoids should be further investigated as well as support of the newborn and developing child.

**Conclusions:** Compared to the preventive efforts targeting alcohol and tobacco use during pregnancy, the increasingly common use of cannabis is relatively neglected and in need of further specific investigations.

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### Distress tolerance moderates the relationship between social rejection and major depressive disorder in inner-city substance users



Bina Ali, Kristen R. Hamilton, Nadia Bounoua, C.W. Lejuez

University of Maryland, College Park, MD, United States

**Aims:** Social rejection contributes to depression. Given the high rates of comorbidity between substance use and depression, it is imperative to understand factors influencing the relationship between social rejection and depression in substance users. Distress tolerance, defined as the ability to withstand negative emotional states, may underlie this relationship. The current study explored whether distress tolerance moderates the association between social rejection and depression in substance users. We hypothesized that the positive relationship between social rejection and depression would be evident only among those with low distress tolerance.

**Methods:** The present study included 72 substance users (84.72% male) receiving inpatient substance abuse treatment. The dependent variable, major depressive disorder, was diagnosed using the Substance Dependence Module of the Structured Clinical Interview for DSM-IV. The main independent variable, social rejection, was elicited and assessed through a virtual ball-toss game, Cyberball. The moderator, distress tolerance, was self-reported using the Distress Tolerance Scale.

**Results:** Logistic regressions indicated a significant interaction between social rejection and distress tolerance in predicting depression in substance users (Wald = 4.63,  $p < 0.05$ ). Probing of this interaction indicated that social rejection was significantly associated with depression among substance users with low distress tolerance (Wald = 4.58,  $p < 0.05$ ), but no relationship was evidenced among those with high distress tolerance (Wald = 0.95,  $p > 0.05$ ).

**Conclusions:** Findings of the study indicate that low distress tolerance is associated with a risk for depression in the context of social rejection in substance users. Depression treatments and interventions may benefit by incorporating distress tolerance skills to reduce depression among substance users who experience social rejection.

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### Gender differences in use of alternative tobacco products among daily and nondaily smokers



Alicia M. Allen<sup>1</sup>, Charu Mathur<sup>2</sup>, Taneisha S. Scheuermann<sup>3</sup>, Nicole Nollen<sup>3</sup>, Dorothy Hatsukami<sup>4</sup>, Jasjit Ahluwalia<sup>3</sup>

<sup>1</sup> Family Medicine & Community Health, University of Minnesota, Minneapolis, MN, United States

<sup>2</sup> Internal Medicine, University of Minnesota, Minneapolis, MN, United States

<sup>3</sup> Preventive Medicine & Public Health, University of Kansas, Kansas City, KS, United States

<sup>4</sup> Psychiatry, University of Minnesota, Minneapolis, MN, United States

**Aims:** We explored gender differences in alternative tobacco products (ATP) use among daily (DS) and nondaily (NDS) smokers. We hypothesized that within each group, men would have higher odds of ATP use compared to women.