Guest editorial

Alexandra Garcia-Guix, Juan Ignacio Mestre-Pinto, Judit Tirado-Muñoz, Antonia Domingo-Salvany and Marta Torrens

Psychiatric co-morbidity among women with substance use disorders

Epidemiological and clinical studies have described a high co-occurrence of substance use disorders (SUD) and other psychiatric disorders, known as "dual diagnosis" (Torrens *et al.*, n.d.; Kingston *et al.*, 2017). These patients with a dual diagnosis are reported to have more emergency admissions, higher prevalence of suicide, increased rates of medical co-morbidity, more risk of relapse in drug use and psychiatric disorder, higher unemployment and homelessness rates and greater incident of violent or criminal behaviour (Greenberg and Rosenheck, 2014; Krausz *et al.*, 2013; Martín-Santos *et al.*, 2006). This dual diagnosis group of patients show poorer treatment outcomes, more clinical and social severity compared with patients with only one disorder, resulting in a high cost to the society (Krausz *et al.*, 2013).

Although SUD is more frequent among males than females, the likelihood of having a comorbid psychiatric disorder is twice as high among women (Torrens *et al.*, 2011). Among the drug-dependent women, dual diagnosis prevalence ranges between 15 and 100 per cent (Frem *et al.*, 2017). Mood, anxiety (including post traumatic stress disorder), eating and borderline personality disorders are the most prevalent disorders, and also more frequent in females in comparison to men (Torrens *et al.*, n.d.; Frem *et al.*, 2017).

Research taking a gendered perspective among patients with coexisting SUD and psychiatric disorders has been growing during the last two decades, but little is known about the mechanism that mediates gender differences (Torrens *et al.*, 2011). A number of potential risk factors may explain this higher psychiatric comorbidity: women with SUD have shown higher genetic vulnerability, more psychiatric disorders in their family history or higher environmental stress that may result in an increased experience of family disruption (Kuehner, 2017). Among these factors, women who are drug dependent are frequently involved in intimate relationships with drug using partners and may support their habits through sex trading and prostitution more frequently than men (Gilchrist *et al.*, 2015). In addition, intimate partner violence (IPV) is highly prevalent among women seeking treatment for a SUD (Gilchrist *et al.*, 2015; Kuehner, 2017; Weaver *et al.*, 2015). The rates of IPV are higher among women who use drugs (25-57 per cent) compared to women who do not (8-16 per cent) (El-Bassel *et al.*, 2011). A meta-analysis of longitudinal studies found a bidirectional relationship between SUD, alcohol in particular, and IPV victimization (Devries *et al.*, 2014). When a SUD is co-occurring with depression or a PTSD, women are more vulnerable to experiencing IPV, less able to detect signs that lead to episodes of violence and less likely to access resources that may improve safety (Farré *et al.*, 2017; Iverson *et al.*, 2013; Weaver *et al.*, 2015). IPV experiences are associated with sexual and injecting risk behaviours such as, less use of condoms, sharing injecting equipment and having multiple sexual partners, which are associated with an increased risk of blood-borne viruses (e.g. HIV and Hepatitis C) and sexually acquired infections. Furthermore, women who use drugs and are suffering IPV are more likely to continue using drugs and have more relapse as a result (Campbell *et al.*, 2008; Weaver *et al.*, 2015). A high rate of co-morbid psychiatric disorders and IPV has also been described among women who inject drugs (Tirado-Munoz *et al.*, 2017).

In comparison to opioid-dependent men, women with opioid use disorder are more likely to be younger, victims of emotional, physical or sexual abuse, and tend to have high rates of psychiatric co-morbidity and multiple SUDs together with complicated social and family dimensions (Green *et al.*, 2009), all of which can impede recovery.

Alexandra Garcia-Guix is based at the Hospital del Mar Medical Research Institute – IMIM, Barcelona, Spain; and Institut de Neuropsiquiatria i addiccions – INAD, Barcelona, Spain.
Juan Ignacio Mestre-Pinto is based at the Hospital del Mar Medical Research Institute – IMIM, Barcelona, Spain; Institut de Neuropsiquiatria i addiccions – INAD, Barcelona, Spain; Redes Temáticas de Investigación Cooperativa en Salud – Red de Trastornos Adictivos (RETICS-RTA), ISCIII, Madrid, Spain; and Universitat Pompeu Fabra (UPF), Barcelona, Spain.
Judit Tirado-Muñoz is based at the Hospital del Mar Medical Research Institute – IMIM, Barcelona, Spain; Institut de Neuropsiquiatria i addiccions (INAD), Barcelona, Spain; and Redes Temáticas de Investigación Cooperativa en Salud – Red de Trastornos Adictivos (RETICS-RTA), ISCIII, Madrid, Spain.
Antonia Domingo-Salvany is based at the Hospital del Mar Medical Research Institute – IMIM Barcelona, Spain.
Marta Torrens is based at the Hospital del Mar Medical Research Institute – IMIM, Barcelona, Spain; Institut de Neuropsiquiatria i addiccions – INAD, Barcelona, Spain; and Universitat Autònoma de Barcelona (UAB), Barcelona, Spain.

The study was supported by grants Redes Temáticas de Investigación Cooperativa en Salud – Red de Trastornos Adictivos (RD16/0017/0010) and PI16/00603 (MT) and PI14/00178 (AD) from Instituto de Salud Carlos III (ISCIII) and FIS-FEDER, Madrid, Spain.

Some additional gender-specific determinants that can influence the expression of dual disorders should be taken into account, like gender inequalities in social circumstances, a greater likelihood of living in poverty among women, the need to combine family responsibilities with work, education, stigma attached to substance use among women, higher risk of victimisation and social expectations for women (Stewart, 2007).

Furthermore, the prevalence of psychiatric co-morbidity among pregnant women who use substances is also significant, varying from 57 to 91 per cent (Coleman-Cowger, 2012; Strengell *et al.*, 2015). Postpartum mood disorders affect approximately 10-20 per cent of women and this prevalence increases among women with lifetime substance use (Prevatt *et al.*, 2017).

In short, women with SUD present more psychiatric co-morbidity than men with SUD and women without SUD; the most frequent psychiatric disorders being depression, anxiety and PTSD. They also have a greater risk of suffering IPV and report more sexual and injecting risk behaviours associated with HIV and HCV infection. These particularities have an impact on both disorders in terms of response to treatment and quality of life; therefore, psychiatric comorbidity among women seeking treatment for their SUD, should be specifically addressed. Policy makers must guarantee the access and appropriate treatment to women with SUD and comorbid psychiatric disorders.

Since the 1990s, a proliferation of gender-sensitive programs have been developed that focus on gender-specific needs, such as caretaking roles, IPV and trauma, risk behaviours, reasons for relapse and co-occurring psychiatric disorders. Additional research is needed to develop and test effective substance abuse treatment interventions for subgroups of women taking into account the diversity of socioeconomic circumstances, cultural background, substances of abuse, family status, risk factors and clinical and psychiatric comorbidities (Greenfield and Grella, 2009). Finally, future studies should explore the underlying genetic, psychosocial and environmental factors that are influencing the development of dual disorder, and possibly underlie gender specificity.

References

Campbell, J.C., Baty, M.L., Ghandour, R.M., Stockman, J.K., Francisco, L. and Wagman, J. (2008), "The intersection of intimate partner violence against women and HIV/AIDS: a review", *International Journal of Injury Control and Safety Promotion*, NIH public access, Vol. 15 No. 4, pp. 221-31.

Coleman-Cowger, V.H. (2012), "Mental health treatment need among pregnant and postpartum women/girls entering substance abuse treatment", *Psychology of Addictive Behaviors*, Vol. 26 No. 2, pp. 345-50.

Devries, K.M., Child, J.C., Bacchus, L.J., Mak, J., Falder, G., Graham, K., Watts, C. and Heise, L. (2014), "Intimate partner violence victimization and alcohol consumption in women: a systematic review and meta-analysis", *Addiction*, Vol. 109 No. 3, pp. 379-91.

El-Bassel, N., Gilbert, L., Witte, S., Wu, E. and Chang, M. (2011), "Intimate partner violence and HIV among drug-involved women: contexts linking these two epidemics – challenges and implications for prevention and treatment", *Substance Use & Misuse*, Vol. 46 Nos 2/3, pp. 295-306.

Farré, A., Tirado-Muñoz, J. and Torrens, M. (2017), "Dual depression: a sex perspective", *Addictive Disorders & Their Treatment*, Vol. 16 No. 2, pp. 180-86.

Frem, Y., Torrens, M., Domingo-Salvany, A. and Gilchrist, G. (2017), "Gender differences in lifetime psychiatric and substance use disorders among people who use substances in Barcelona, Spain", *Advances in Dual Diagnosis*, Vol. 10 No. 2, pp. 45-56.

Gilchrist, G., Singleton, N., Donmall, M. and Jones, A. (2015), "Prevalence and factors associated with sex trading in the year prior to entering treatment for drug misuse in England", *Drug and Alcohol Dependence*, Vol. 152, July, pp. 116-22.

Green, T.C., Grimes Serrano, J.M., Licari, A., Budman, S.H. and Butler, S.F. (2009), "Women who abuse prescription opioids: findings from the Addiction Severity Index-Multimedia Version® connect prescription opioid database", *Drug and Alcohol Dependence*, Vol. 103 Nos 1/2, pp. 65-73.

Greenberg, G.A. and Rosenheck, R.A. (2014), "Psychiatric correlates of past incarceration in the national co-morbidity study replication", *Criminal Behaviour and Mental Health*, Vol. 24 No. 1, pp. 18-35.

Greenfield, S.F. and Grella, C.E. (2009), "Alcohol & drug abuse: what is 'women-focused' treatment for substance use disorders?", *Psychiatric Services*, Vol. 60 No. 7, pp. 880-2.

Iverson, K.M., Litwack, S.D., Pineles, S.L., Suvak, M.K., Vaughn, R.A. and Resick, P.A. (2013), "Predictors of intimate partner violence revictimization: the relative impact of distinct PTSD symptoms, dissociation, and coping strategies", *Journal of Traumatic Stress*, Vol. 26 No. 1, pp. 102-10.

Kingston, R.E.F., Marel, C. and Mills, K.L. (2017), "A systematic review of the prevalence of comorbid mental health disorders in people presenting for substance use treatment in Australia", *Drug and Alcohol Review*, Vol. 36 No. 4, pp. 527-39.

Krausz, R.M., Clarkson, A.F., Strehlau, V., Torchalla, I., Li, K. and Schuetz, C.G. (2013), "Mental disorder, service use, and barriers to care among 500 homeless people in 3 different urban settings", *Social Psychiatry and Psychiatric Epidemiology*, Vol. 48 No. 8, pp. 1235-43.

Kuehner, C. (2017), "Why is depression more common among women than among men?", *The Lancet Psychiatry*, Vol. 4 No. 2, pp. 146-58.

Martín-Santos, R., Fonseca, F., Domingo-Salvany, A., Ginés, J.M., Ímaz, M.L., Navinés, R., Pascual, J.C. and Torrens, M. (2006), "Dual diagnosis in the psychiatric emergency room in Spain", *European Journal of Psychiatry*, Vol. 20 No. 3, pp. 147-56.

Prevatt, B.-S., Desmarais, S.L. and Janssen, P.A. (2017), "Lifetime substance use as a predictor of postpartum mental health", *Archives of Women's Mental Health*, Vol. 20 No. 1, pp. 189-99.

Stewart, D.E. (2007), "Social determinants of women's mental health", *Journal of Psychosomatic Research*, Vol. 63 No. 3, pp. 223-4.

Strengell, P., Väisänen, I., Joukamaa, M., Luukkaala, T. and Seppä, K. (2015), "Psychiatric comorbidity among substance misusing mothers", *Nordic Journal of Psychiatry*, Vol. 69 No. 4, pp. 315-21.

Tirado-Munoz, J., Gilchrist, G., Taylor, A., Fischer, G., Moskalewicz, J., Di Furia, L., Köchl, B., Giammarchi, C., Dąbrowska, K., Shaw, A., Munro, A. and Torrens, M. (2017), "Psychiatric comorbidity and intimate partner violence among women who inject drugs in Europe: a cross-sectional study.tle", *Women's Mental Health. Second Revisions*, available at: https://link.springer.com/article/10.1007%2Fs00737-017-0800-3; https://doi.org/10.1007/s00737-017-0800-3

Torrens, M., Gilchrist, G. and Domingo-Salvany, A. (2011), "Psychiatric comorbidity in illicit drug users: substance-induced versus independent disorders", *Drug and Alcohol Dependence*, available at: https://doi.org/10.1016/j.drugalcdep.2010.07.013

Torrens, M., Mestre-Pintó, J.-I. and Domingo-Salvany, A. (n.d.), "Comorbidity of substance use and mental disorders in Europe", available at: www.emcdda.europa.eu/system/files/publications/1988/TDXD15019ENN.pdf (accessed 16 October 2017).

Weaver, T.L., Gilbert, L., El-Bassel, N., Resnick, H.S. and Noursi, S. (2015), "Identifying and intervening with substance-using women exposed to intimate partner violence: phenomenology, comorbidities, and integrated approaches within primary care and other agency settings", *Journal of Women's Health*, Vol. 24 No. 1, pp. 51-6.