

**Results** Two hundred and twenty nine incidents of head banging were recorded, occurring approximately every three days in each service. The prevalence of the behaviour between individual patients varied widely, ranging from one to 38 incidents within one year. Women and patients with intellectual disability appeared more likely to engage in head banging. Qualitative incident reports indicated that head banging was associated with mental distress, anger, and psychotic experiences.

**Discussion** Head banging occurs frequently in forensic services, and has documented associations with traumatic brain injury in affected individuals, thus negatively impacting progress through the care pathway and treatment outcomes. Further research should investigate short and long term management strategies and treatment approaches, in order to minimise harm.

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#### EV0554

### The prevalence of obesity among forensic intellectual disability inpatients

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**Background** Inpatient mental health settings have been described as “obesogenic” environments, due to factors including psychotropic medication, high calorie food, restricted physical activity and sedentary lifestyles. No research has investigated obesity among forensic intellectual disability inpatients, despite this populations’ increased risk. Therefore, this paper aims to evaluate the prevalence and correlates of overweight and obesity on, and during admission.

**Method** The weight and body mass index data of 46 inpatients (15 women and 31 men) within a specialist intellectual disability forensic service was examined for the study.

**Results** Only six patients (13%) were a normal weight at admission, whereas 40 (87%) were overweight or obese. During their admission, 28 (61%) gained weight (average 11.8 kg), and one (2%) maintained. However, 17 patients (37%) lost weight (average 6.2 kg), though 16 remained in overweight/obese categories. There was no correlation between length of stay and weight/BMI.

**Conclusions** The majority of patients were overweight or obese on admission, and approximately 60% gained weight during their admission. Women appeared at greater risk of obesity. There was no relationship between length of stay and weight. This is potentially due to the high prevalence of obesity on admission and the impact of previous admissions on weight. The results highlight the need for effective weight management interventions with this population.

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### The phenomenon of serial killers from the perspective of the seven deadly sins

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**Objectives** The aim of this paper is to make a comparative study on serial killers from different countries and link them to one of the traditional seven deadly sins in the Judeo-Christian culture.

**Methods** Firstly, it was necessary to define each different deadly sin and establish its behavioural correlate. This was achieved thanks to a questionnaire designed to measure the interrate agreement within a sample population. Once the categories were defined (pride, lust, envy, sloth, wrath, gluttony and greed), 30 serial killers from America and Europe were analyzed in order to determine the sin behind their motivation to commit a crime. The evaluation was based on the Coding Guide – Serial Killers Research Project – created by the unit of analysis of criminal behavioural (University of Salamanca, Spain). Afterwards, an ex post facto descriptive non experimental study was carried out to find out the relation between the serial killer’s own characteristics and the deadly sin linked to their motivation.

**Results/conclusions** The results show a clear predominance of pride, lust and greed as the main motivations within the study sample. As well as some possible dependency relations between killers’ motivations and some other variables, which could be helpful when applied to the offender profiling field like sex or personality.

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#### EV0556

### Serial killers: Relation between childhood maltreatment and sexual relations with the victims

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**Introduction** Serial killer’s (SK) familiar relations often present a disorganized adherence characterized by the paternal absence and the excessive maternal coldness or over-protection. This familiar diagram, joined to mistreatment situations, could generate different antisocial conducts in the child because of the vacancy of a significant strong figure.

**Objectives** To study, in the SK, the relation between having suffered childhood mistreatment and the sexual aggression to the victims before killing them.

**Method** A study is realized between the variables of childhood mistreatment and sexual aggression to the victims. The data has been extracted from 100 protocols of SK with different nationalities elaborated by the unit of analysis of criminal behavioral (University of Salamanca, Spain).

**Results** The results show a significant relation between both variables.

**Conclusions** It can be confirmed that the SK who have suffered childhood mistreatment sexually attack their victims before killing them while those who did not experiment it during their childhood do not realize that conduct.