Objective Functional neurological disorder (FND) is characterised by unexplained neurological symptoms, including movement, seizures or sensory symptoms that are unrelated to an underlying neurological disorder. As FND presents as an underdiagnosed condition in neurology clinics (Stone et al, 2010) and the current understanding of its aetiology is limited, research into the neural disturbances present in this group is critical. FND subjects have been shown to display enhanced amygdala activity to arousing stimuli (Voon et al, 2010), however delineation of the roles of each subnuclei have not yet been achieved. In this study, we examined the response of FND subjects to fear conditioning and their sensitivity to loss.

Method 25 FND and 20 healthy volunteers (HV) were conditioned to aversive/negative affective (CS+) or neutral (CS-) stimuli. During functional MRI, subjects performed a two-choice learning task to avoid monetary loss. The stimuli used in the two-choice task included the previously conditioned stimuli and were associated with a greater likelihood of a loss outcome.

Results FND patients were more impaired at learning to avoid losses. Using reinforcement learning modelling, we show that FND subjects had a more negative valuation of the CS+ and greater noisy choice behaviours in the context of the CS+. Compared to HV, FND patients showed enhanced Centromedial amygdala responses to loss compared to neutral feedback in the context of the negative/aversive CS+, which correlated with greater impairments in avoidance learning.

Conclusion The findings show that although FND patients have enhanced sensitivity to negative outcomes, this fails to be adaptive, and is not used to guide avoidance learning. We show no evidence for greater harm avoidance but rather a generalised impairment in the capacity to use negative outcomes to guide behaviours. Furthermore, fearful learned contexts enhance the randomness of choice behaviours, thus highlighting a potential mechanism by which negative contexts interfere with adaptive behaviours. Our findings further detail the aetiology of a common but elusive disorder and highlight the potential utility of interventions targeting the salience of negative stimuli.

Objective To review the methods used for determining novel psychiatric research diagnoses in children and adolescents after acquired brain injury, and their limitations.

Method A literature search was conducted using EMBASE, Medline, PsycInfo, and CINAHL. 61 papers were identified, of which 18 met the inclusion criteria. The 18 papers were analysed in terms of their focus, participant characteristics, psychiatric disorders studied, evidence level, and the methods used for diagnosing novel psychiatric disorders. A grounded theory approach was used to classify any limitations identified in the papers.

Results The majority of studies focused on specific psychiatric disorders or symptoms. Most studies included participants with a broad range of ages and injury severity. Mood disorders, anxiety disorders and secondary ADHD were commonly studied. All studies used standardised assessment measures for determining psychiatric diagnoses. Most studies used structured clinical interviews, predominantly K-SADS. Limitations were identified relating to general study design, the participant.

Conclusion Studying novel psychiatric disorders after paediatric ABI is a highly important but challenging area. Further research is needed to assess the validity of current assessment methods, and to develop new tools for specific use in this population. Researchers in this area should be mindful of the multiple limitations faced, and address or acknowledge these where possible.

Objective To determine the level of screening for cardiovascular risk factors in patients on antipsychotic medications.

Method The electronic medical records of patients at two UK general practices were searched for read codes relating to antipsychotic medication use. This identified 25 patients. The notes of these patients were then reviewed to determine whether any form of screening took place in the last year regarding blood pressure recording, BMI calculation, fasting glucose/HbA1c measurement, lipids monitoring and smoking cessation.

Results In the last year, 76% (n=19) of identified patients had their blood pressure recorded, 88% (n=22) had their BMI calculated, 76% had their fasting glucose/HbA1c measured, and 76% had their lipids monitored. Eleven patients (44%) smoked, and of these 72% (n=11) had been offered smoking cessation support.

Conclusion This audit highlighted a good standard of screening for cardiovascular risk factors. Methods to improve the level of screening may include opportunistic screening in difficult to reach patients, as well as secondary care working in collaboration with primary care to ensure the patient’s screening is completed.

Objective To review the methods used for determining novel psychiatric research diagnoses in children and adolescents after acquired brain injury, and their limitations.

Method A literature search was conducted using EMBASE, Medline, PsycInfo, and CINAHL. 61 papers were identified, of which 18 met the inclusion criteria. The 18 papers were analysed in terms of their focus, participant characteristics, psychiatric disorders studied, evidence level, and the methods used for diagnosing novel psychiatric disorders. A grounded theory approach was used to classify any limitations identified in the papers.

Results The majority of studies focused on specific psychiatric disorders or symptoms. Most studies included participants with a broad range of ages and injury severity. Mood disorders, anxiety disorders and secondary ADHD were commonly studied. All studies used standardised assessment measures for determining psychiatric diagnoses. Most studies used structured clinical interviews, predominantly K-SADS. Limitations were identified relating to general study design, the participant.

Conclusion Studying novel psychiatric disorders after paediatric ABI is a highly important but challenging area. Further research is needed to assess the validity of current assessment methods, and to develop new tools for specific use in this population. Researchers in this area should be mindful of the multiple limitations faced, and address or acknowledge these where possible.