ill population has been difficult. OBJECTIVES: To explore protective and risk factors for a later severe violent offense (i.e. forensic admission) among the mentally ill (schizophrenics) and to do thorough investigation for appropriate models. METHODS: Between 1998–2000, 308 forensic and general psychiatry patients were recruited to case-control study in Canada, Finland, Germany, and Sweden. An innovative greedy naive Bayesian (NB) algorithm P-Course was utilized to search generalized factors from national datasets into a merger model (naive Bayesian fusion). The evidence was assessed with posterior odds (PO) and the predictions with accuracy, diagnostic odds ratio (DOR), area under ROC curve (AUC), Gini coefficient and logarithmic loss (log score). The models were tested using leave-one-out cross-validations and substitution procedures in which data was divided into separate teaching and test sets. RESULTS: The most influential predictive risk factors for violent offence include violent behavior prior to the index hospitalization (PO 11.8; 95% credibility interval 5.9–30.3), biological father’s conviction (9.4; 4.7–20.0), no use of psychotropic medications before the age of 18 (7.7; 4.3–16.5), and biological father’s substance abuse (2.6; 1.7–4.1). The merger model indicates very good discriminative power (DOR from 30.25; AUC from 0.82; Gini from 0.63; log score below 0.65) as well as robustness and accuracy (Canadian 82.5%; Swedish 87.1%) for the test sets. CONCLUSIONS: The characteristics of biological father and no use of psychopharmaceuticals before the age of 18 among mentally ill were related to committing a later severe violent offense. The exploration and predictions were carried out with P-Course and the multinational merger NB model indicated high discriminatory power and robustness compared to previous studies.

ASSESSMENT OF RESOURCE UTILISATION IN ADULTS DIAGNOSED WITH DEPRESSION IN THE UK: A GPRD-BASED STUDY

OBJECTIVES: While the prescription of SSRIs and SNRIs for major depressive disorder (MDD) has increased, resource utilisation has rarely been studied in large populations in real-life settings. The purpose of this study was to assess resource utilisation associated with the prescription of antidepressants in an adult population with MDD in primary care using data extracted from the General Practitioner Research Database (GPRD).

METHODS: We conducted a retrospective study using the GPRD. Patients diagnosed with MDD aged 18–70 having a new prescription of paroxetine, fluoxetine, citalopram, sertraline, escitalopram, venlafaxine or amitriptyline between January 1, 2001 and September 30, 2003 and not having received antidepressant treatment in the previous six-months were included. Analyses focused on first depressive episodes for each patient. Patient, disease and treatment characteristics, GP visits, referrals and hospitalisations were analysed. RESULTS: Information was gathered from over 59,000 patients. Mean age of patients was 39 and 69% were female. 37% suffered from mild depression, 37% moderate and 6% severe. Mean time of a depressive episode was about 6 months. Patients visited a GP on average 10 times per episode. There was a trend between frequency of GP visits and severity per episode (10 for mild, 11 for moderate and 12 for severe). 2% of patients were referred to psychiatric specialists. Compared with patients under SSRIs, there were 80% more referrals under SNRIs and 20% fewer under TCAs. 4% of all patients were hospitalized: 60% more hospitalisations under SNRIs and 40% more under TCAs compared with SSRIs. CONCLUSIONS: This GPRD-based study provides better knowledge of medical resource use in depressed patients in the UK. It should promote better prescription strategies and use of antidepressants in primary care.