

A prospective study of criminal risk behaviours in frontotemporal dementia

Fiona Kumfor, Nola Ries, Hayley P. Bennett, Mirelle D'Mello, Christina Kozlowski, Grace Wei, Cassandra Kaizik, John R. Hodges, Olivier Piguet

State of the art: Two of the three main subtypes of frontotemporal dementia (FTD) are characterised by impaired social cognition and behavioural changes. In some cases, this can lead to the emergence of behaviours which may be classified as antisocial or criminal. The few studies examining this phenomenon, however, have used retrospective case reviews, or have comprised relatively small samples. Here, we aimed to systematically examine criminal risk behaviours using a novel, purposefully designed tool - the Misdemeanours and Transgressions Screener (MATS).

Methodology: Two-hundred and seventeen participants (77 behavioural-variant frontotemporal dementia (bvFTD), 48 semantic dementia (SD), 8 right-SD, 17 progressive nonfluent aphasia, 18 logopenic progressive aphasia, 49 Alzheimer's disease) were recruited and their informants completed the MATS.

Results: Irrespective of diagnosis, 41.9% of participants reported at least 1 criminal risk behaviour, with the most common behaviours being verbal abuse (n=44), financial/professional transgressions (n=42), traffic violations (n=23) and inappropriate sexual behaviours (n=22). In 22 individuals (10.1%), this behaviour led to involvement of the police/authority figures. The frequency of criminal risk behaviours differed according to diagnosis ($\chi^2=23.187$; $p < .001$), with bvFTD (62.3%), SD (37.5%) and right-SD (37.5%) demonstrating more criminal risk behaviours than the other dementia subtypes.

Conclusion: This large prospective study reveals that criminal risk behaviours are remarkably common in FTD, particularly in bvFTD and SD. These behaviours place patients at risk of inappropriate interactions with the justice system. Research into potential demographic, cognitive, and neurobiological mechanisms that contribute to the emergence of these behaviours is needed.

Conflicts of interest

FK is supported by a National Health and Medical Research Council Career Development Fellowship (GNT1159762).