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Schizophrenia Research 72 (2005) 161–168

SCHIZOPHRENIA RESEARCH

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Incidence and clinical correlates of aggression and violence at presentation in patients with first episode psychosis

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Received 22 March 2004; received in revised form 25 March 2004; accepted 25 March 2004
Available online 18 May 2004

Abstract

This study aimed to identify the incidence and clinical correlates of aggression and violence in first episode psychosis. We prospectively recruited subjects with a first episode of DSM-psychosis presenting from a geographically defined catchment area to a secondary referral psychiatric service over a four-year period ($n = 157$). We used the Modified Overt Aggression Scale to retrospectively assess aggression (a hostile or destructive mental attitude, including verbal aggression, physical aggression and/or violence) and violence (the exercise of physical force), blind to diagnosis. One in three patients with psychosis was aggressive at the time of presentation. One patient in 14 engaged in violence that caused, or was likely to cause, injury to other people. Aggression was independently associated with drug misuse (odds ratio (OR) 2.80, 95% confidence interval 1.12–6.99) and involuntary admission status (OR = 3.62, 95% CI 1.45–9.01). Violence in the week prior to presentation was associated with drug misuse (OR = 2.75, CI 1.04–7.24) and involuntary admission status (OR = 3.21, CI 1.21–8.50). Violence in the week following presentation was associated with poor insight (OR 2.97, CI 1.03–8.56) and pre-contact violence (OR 3,82, CI 1.34–10.88). In patients with schizophrenia, violence in the week following presentation was associated with drug misuse (OR = 7.81, CI 1.33–45.95) and high psychopathology scores (OR = 20.59, CI 1.66–254.96). Overall, despite a high rate of verbal aggression, physical violence towards other people is uncommon in individuals presenting with first episode psychosis.

Keywords: Schizophrenia; Psychosis; Aggression; Violence

1. Introduction

Over 50% of violent or abusive incidents that occur in health-care settings occur in the context of mental health care (Swanson et al., 1990; Link et al., 1992; Torrey, 1994; National Health Service, 2001). Individuals with schizophrenia in particular are reported to engage in acts of aggression that are more frequent and more severe than those in other psychiatric illnesses (Rossi et al., 1985; Pearson et al., 1986; Tardiff et al., 1997). At a societal level, however, the proportion of violent crime attributable to schizophrenia is low

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doi:10.1016/j.schres.2004.03.010

(Walsh et al., 2001). Moreover, it is likely that much of the violence associated with schizophrenia is attributable to comorbid substance misuse, which increases risk of violence both in individuals with and without mental illness (Steadman et al., 1998).

The usefulness of clinical variables in predicting aggression and violence in individuals with mental illness remains unclear (Blomhoff et al., 1990). Studies to date are undermined by the use of varying definitions of aggression and violence and a paucity of standardized, validated instruments to assess aggressive or violent acts (Steinert et al., 1999; Milton et al., 2001).

We assessed the incidence and clinical correlates of aggression and violence in individuals presenting with first episode psychosis (both inpatients and outpatients) from a geographically defined catchment area over a 4-year period. We classified individuals as aggressive if they demonstrated a hostile or destructive mental attitude, which included verbal aggression, physical aggression, or both. We defined violence as the exercise of physical force; all individuals who were classified as violent were, by definition, also classified as aggressive.

2. Methods

The sample was drawn from a study of first episode psychosis based at the Cluain Mhuire Family Centre and St. John of God Hospital, Dublin, Ireland. The Cluain Mhuire Family Centre provides community-based mental health care for a geographically defined urban population of approximately 165,000 people. St. John of God Hospital is an inpatient psychiatric facility which accepts admissions from the catchment area and countrywide; only individuals presenting from within the catchment area were included in this study. Following approval by the Ethics Committee of St. John of God Hospital, we explained the overall nature and purpose of the first episode study to each subject prior to participation. The sample comprised all individuals aged between 16 and 65 years, who presented from the geographically defined catchment area over a four year period (1995–1998, inclusive) and met the DSM-III-R criteria for schizophrenia or other psychotic disorder. We defined "first episode" as the first presentation of an individual with acute psychotic symptoms to a psychiatric service.

We performed a Structured Clinical Interview for DSM-III-R (SCID) with each individual when their condition had stabilized (Spitzer and Williams, 1986). We collected relevant socio-demographic data at time of admission. Data relating to alcohol abuse and drug misuse were derived from the SCID interview. We assessed symptomatology and insight using the Positive and Negative Syndrome Scale (PANSS) (Kay et al., 1987). The 'activation score' (range: 3–21) is calculated by summing each individual's scores for 'excitement' (range: 1–7), 'tension' (range: 1–7) and 'mannerisms and posturing' (range: 1–7) (Kay et al., 1987).

We examined both aggression and violence in this study. The Collins English Dictionary and Thesaurus (Treffry, 2003a) defines aggression as "a hostile or destructive mental attitude," which includes verbal aggression, physical aggression or both. Violence is defined as the "exercise or an instance of physical force" (Treffry, 2003b). In our study, individuals who engaged in verbal aggression but not in the exercise of physical force were classified as aggressive but not as violent. However, individuals who engaged in the exercise of physical force and were classified as violent were also classified as aggressive; the violent group was, therefore, a subset of the aggressive group.

We used the Modified Overt Aggression Scale (MOAS) to assess aggression and violence (Kay et al., 1988). The MOAS is a modified version of the Overt Aggression Scale (OAS) devised by Yudofsky et al. (1986). This scale comprises four subscales: verbal aggression, aggression against property, autoaggression and aggression towards others. Based on review of case notes, each individual was rated on a scale between zero (no aggression) and four (maximum score) on each subscale. All individuals who attempted suicide received a score of 4 on the 'autoaggression' subscale. The subscale scores were weighted as described by Kay et al. (1988) in order to calculate the total MOAS score: the verbal aggression score was multiplied by 1; the aggression against property score was multiplied by 2; the autoaggression score was multiplied by 3; and the aggression towards others score was multiplied by 4. The sum of these weighted scores is the MOAS total score.

We recoded the aggression ratings of the MOAS into binary form to generate a 'violence score.' An individual received a violence score of 0 if they scored