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Thomas Fuchs

Uprooting and late-life psychosis

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Abstract Biographical information was collected on 60 patients suffering from late-onset (> 50 years) paranoid psychosis (with and without hallucinations), 38 by chart review and 22 by personal examination. Of the patients 28 (47%) had been war refugees expelled from the eastern territories that Germany lost after World War II. This is more than twice the rate of the Bavarian general population. The onset of paranoid symptoms was usually 3 or 4 decades after immigration into western Germany. Among patients with Alzheimer's disease and with endogenous depression the proportion of former war refugees was significantly lower (22% each). The possible relevance of early uprooting and expulsion to the development of late-life paranoid psychosis is examined.

Key words Late paraphrenia · Early-life trauma
Uprooting · Expulsion

Introduction

Paranoid psychoses of later life have been variably classified as late-onset schizophrenia (Bleuler 1943; Harris and Jeste 1988), late paraphrenia (Kraepelin 1913; Kay and Roth 1961), and paranoia or delusional disorder (Flint et al. 1991; Kendler 1980, 1982). Regardless of nosological questions research into the causes of these paranoid states has established certain risk factors and triggering conditions such as genetic influences (although weaker than in early-onset schizophrenia), paranoid or schizoid personality traits, female, social isolation, sensory impairment (especially hearing loss) and mild cognitive deterioration (Kay and Roth 1961; Naguib and Levy 1991; Almeida et al. 1992; Fuchs 1993; Lacro et al. 1993).

The question of whether *life events* also may contribute to the origin of late-life psychosis has not been studied systematically. Only recently Gurian et al. (1992), on the basis of nine elderly paranoid patients, four of whom were former war refugees, have speculated on a possible connection between early-life trauma, infertility and a higher risk of delusional disorder in late life. In this context Busuttil et al. (1993) also pointed to the possibility that these patients could suffer from lifelong post-traumatic stress disorder. Since Oedegaard's (1932) classical study on the increased incidence of schizophrenic psychoses among Norwegian immigrants in Minnesota the connection between migration and paranoid states has been repeatedly confirmed (Eitinger 1960, 1965; Mezey 1960; Sanua 1969). Especially *forced* migration caused by war events or expulsion was found to constitute a major trauma that often gave rise to feelings of distress, anxiety, threat or resentment, and thus favoured paranoid reactions (Murphy 1977). However, because this refers to the more immediate effects of resettlement during the following years, speculations on a possible impact of stressful biographical events on late-life paranoid states are not based on sufficient empirical data.

The present study on a large sample of patients with late-life psychosis for the first time shows clear evidence of a connection between the origin of these disorders and a past history of flight or expulsion caused by war events decades before. The early trauma of uprooting and homelessness seems to contribute to a lifelong vulnerability that serves as a matrix for delusions of persecution, harm or expulsion in old age.

Patients and methods

Between 1980 and 1993 60 patients admitted to the Psychiatric Clinic of the Technical University, Munich, with a diagnosis of schizophrenic or paranoid psychosis (295.x or 297.x according to ICD-8 or ICD-9) and onset of symptoms after the age of 50 years were included in the investigation. In 38 of these cases demographic, biographical and psychopathological information was collected retrospectively by case records. The author personally examined 22 patients in the course of an ongoing study on late para-

phrenia. Patients with dementia, primary affective disorder, clouding of consciousness, neurological (especially cerebrovascular) illness or a history of alcohol abuse were excluded. Another 4 patients had to be excluded because of uncertain diagnosis in the case record.

For comparison case records of 60 patients admitted consecutively between 1988 and 1989 to the same clinic with a diagnosis of unipolar endogenous depression (296.1 according to ICD-9) and with a first episode after the age of 50 years were also scrutinized. The second control group consisted of 90 patients with Alzheimer's disease who had been enrolled between 1988 and 1990 in a longitudinal study (Haupt et al. 1992). For statistical analysis Fisher's Exact Test was used ($P < 0.05$).

Results

Upon admission, the *paranoid patients* had a mean age of 68 years (range 51–85; SD 10.1 years; 50 [83.3%] females and 10 males). The previous duration of illness varied from 3 months to 35 years (mean 5.3 years). The age at onset of delusional symptoms ranged between 50 and 84 years (mean 63 years; SD 10.0 years).

A total of 48 patients were diagnosed as having paranoid or paraphrenic psychosis (ICD-9 297.x) and 12 as having schizophrenia (ICD-9 295.x). Because paraphrenia also includes schizophrenic symptoms (e.g. hallucinations), a total of 25 patients showed first-rank symptoms of schizophrenia (Schneider 1959): predominantly voices discussing the patient, running commentary or passivity phenomena. Hallucinations were found in 38 (63%) patients, mostly in the auditory (47%) or olfactory (20%) mode. The delusional contents were persecutory in 54 (90%) cases, whereas the topics of religion, jealousy and infestation were each observed in only 2 cases. Particularly 42 (70%) patients had the delusion that the walls, floors or ceilings of their homes were permeated by hostile attacks. Janzarik (1973) and Howard et al. (1992) found these "partition delusions" to be quite specific for late paraphrenia.

Biographical analysis showed that 28 (46.7%) patients had been forced to leave their home countries in the course of mass expulsions during the years 1944–1946, which gave them the official status of *Vertriebene* (expellees). Most of them came from the former eastern parts of Germany that were changed to Polish and Czechoslovakian property after World War II: 12 were Sudeten Germans, 10 Silesians, 3 came from eastern Prussia or Danzig and 3 (of German descent as well) from outside the territory of the former German Reich. One Jewish Silesian had survived persecution in Nazi concentration camps. Of the 22 patients who were examined personally, 13 were expellees.

At the time of expulsion from their homes the patients had been between 13 and 41 (mean 25) years old. The interval between this life event and the onset of paranoid psychosis usually amounted to a few decades, on average 38 years (SD 7.7 years). Expellees did not show significant differences from nonexpellees regarding gender, age, marital status, housing conditions (living alone or with relatives), number of children, onset and duration of ill-

ness, psychopathology and diagnosis. However, on average expellees had married 3 years later than nonexpellees (29.8 vs 26.7 years; $n = 23$ and 28, respectively). Of the female expellees 11 of 24 (46%) had remained childless compared to only 35% of female nonexpellees. Expelled women had fewer children than nonexpelled women (1 vs 1.3 children on average). These differences, however were not significant.

The 60 patients with *endogenous depression* (40 females and 20 males) had a mean age of 67 years upon admission (SD 8.8 years). The age at onset of illness ranged from 50 to 81 years, with a mean of 62 years (SD 7.5 years). Their mean year of birth was 1922 (1920 in the paranoid group). Only 13 (21.7%) were expellees, a significantly lower rate compared to the paranoid group ($\chi^2 = 8.86$; $P < 0.01$).

A further comparison of data yielded other significant differences between paranoid and depressed patients. At the onset of illness the depressed patients were far more frequently married (66.7% vs 38.3% of the paranoid patients) and less-often divorced (3.3% vs 21.7%). By that time 75% of the depressed patients had been living with their spouses or with other relatives, whereas only 46.6% of the paranoid patients did so. Of the depressed women 12 of 40 (30%) had remained childless compared to 40% of the paranoid women (20 of 50). These results are in accordance with those of Kay and Roth (1961) on low personal attachment and isolated situation of late-paraphrenic patients, which have been repeatedly confirmed.

The 90 patients with *Alzheimer's disease* had a mean age of 73 years at the time of their examination (range 56–89 years; SD 7.8 years). Their mean year of birth was 1915. Only 20 (22.2%) were expellees, again a much lower rate than was found in the paranoid group ($\chi^2 = 9.89$; $P < 0.01$).

Discussion

During the years 1944–1946 between 6 and 8 million people were expelled from previous German territories or homelands in the East. Having passed through refugee camps as "DPs" (displaced persons) they were distributed over the German *Bundesländer* and communities. Following census results from 1950 and 1970 their share in the population of Bavaria amounted to 21% and 18%, respectively (Reichling 1986). Thus, in both the depressed and demented patients the proportion of expellees matches the expectation of one-fifth, whereas in the paranoid patients more than twice as many expellees were found, a highly significant difference.

As in this historic case an entire ethnic group was expelled indiscriminately, the overrepresentation of expellees among the paranoid patients cannot be explained by a process of selection (persons with a preexisting vulnerability to delusional experience also being more prone to emigration). The result therefore suggests that the involuntary loss of home in earlier life specifically predisposes to later paranoid disorder. Of particular relevance is

the fact that involuntional depression, another functional disorder of later life, which is known to be highly dependent on adverse life events, was *not* associated with an increased number of former expellees.

The interval between this life event and the onset of delusions in the paranoid patients covered a mean period of 4 decades, with sufficient social integration in most cases and without manifest psychiatric disorders. Can we imagine that a traumatic life event exerts an effect after such a long time? Such an idea would be well in accordance with another risk factor repeatedly found for late paraphrenia, namely hearing loss, which precedes the illness by 2 or 3 decades in the majority of patients (Cooper et al. 1974; Cooper 1976; Fuchs 1993; Kay et al. 1976; Naguib and Levy 1987). In both cases one could hypothesize that latent and lasting emotional stress is compensated by the occupational and family engagement of adult life. When this engagement diminishes, and other (e.g. organic) alterations of later life reduce resistance, it could lead to decompensation, and thus to a late effect of traumatic events that occurred early in life.

This hypothesis is supported by several results of research into the psychiatric consequences of migration. In Oedegaards (1932) classical demonstration of an increased incidence of schizophrenia among Norwegian migrants in Minnesota the peak of illness-onset in men was during the first years following immigration. In women, however, it was much later and occurred mostly in later life. Krupinski (1967) also found that the first admission rate for schizophrenia among eastern European immigrants was six times the native-born rate, with a peak 1–2 years after immigration for men and 7–15 years for women. As a possible explanation Krupinski pointed to menopause and the termination of the mother's role, with the offspring becoming adult and independent, and women's cultural-assimilation lag compared to men who were not likewise tied to their homes. Furthermore, in a study of psychiatric first-admissions at Bradford (Hitch and Rack 1980) the admission rate for paranoid disorders among the population of former war refugees from eastern Europe was found to be significantly higher than among the native born, even 25 years after the end of World War II. Finally, Kendler (1982), reviewing several demographical studies from the first half of the century, also reports a significantly higher rate of foreign-born among patients with delusional disorder compared to schizophrenic or affective illness. The time interval from immigration to first-time illness, however, is not mentioned in these studies.

The psychological impairment of holocaust survivors in old age may provide another example, although here the persecutory trauma itself was of course far more serious. By contrast to many other mental disorders, not an alleviation but rather an aggravation of symptoms was the natural course, which may be interpreted as a stepwise breakdown of previous adjustment and coping strategies. Repressed memories return when concentration on present activities diminishes and no longer offers shelter (Schmitt and Stoffels 1991). Freudenberg (1991), in an

analysis of 77 repeated expert opinions on indemnification of holocaust survivors aged 55 years and over, found an increase in suspicion and paranoid ideation with advancing age. Similar after-effects of early persecutory traumata were reported by Eitinger (1973), Dasberg (1987), Eaton et al. (1982). A lifelong post-traumatic stress disorder is also known from other catastrophic life events (Scaturro and Hayman 1992; Busuttill et al. 1993).

Finally, by bringing to mind the trauma of expulsion and its circumstances we may obtain further clues about the connection between this life event and later paranoid illness. It may first be noted that among the patients interviewed by the author the 13 expellees all mentioned their expulsion in first or second place of a list of worst life experiences. In the psychiatric literature the situation of flight or expulsion with all its consequences has usually been described by the term *uprooting* (Pfister-Ammende 1950, 1961; von Baeyer et al. 1964), introduced into psychiatry by Kraepelin (1920). It illustrates the loss of geographical home and intimate social bonds, entailing a lasting disturbance of self-confidence and self-esteem despite the seemingly good social integration of the refugees in former West Germany.

The development of a basic paranoid outlook may not only be due to this loss, but also (or even more) to the experience of being exposed to and at the mercy of a hostile environment (e.g. two of the women examined were raped on their flight by enemy soldiers; two others were imprisoned for several weeks before their expulsion), to the humiliation of expulsion, to the loss of property and of social rank and, finally, to the uncertain status of a refugee and outsider in a new community. In many of the patients examined such traumata resulted in feelings of distrust, resentment and suffered injustice. These feelings were to some extent even stirred up by official German policy in the subsequent years, and were certainly apt to favour the projection of guilt. Paranoid traits of the previous personality such as suspiciousness, seclusion or hostility were found in 9 of the 13 expellees that were personally interviewed.

The lasting impression of the *vulnerability of one's own territory* may be another important factor contributing to the development of a paranoid attitude in expelled persons. Delusions concerning the violation of the boundaries of one's dwelling ("partition delusions") or the impending expulsion from home were found in more than two-third of our paranoid sample. Assuming that the trauma of expulsion favoured a special identification of the aging patients with the "protecting shell" of their dwelling (Fuchs 1994), these delusions may well be interpreted as a recurrence of the early trauma. In this way expulsion as a predisposing life event would also have a meaningful connection to the specific content of late-life delusions, which are closely associated with the home and its boundaries: The protecting walls and barriers change into fragile facades through which enemies start their attacks, thus renewing the former loss of home and territory.

Beyond these considerations the collected data are not sufficient to permit a further analysis of possible connec-

tions between expulsion and delusional psychosis. One could imagine, for example, an adverse effect of the loss of home on later marriage or birth rate with the consequence of loneliness in old age, as Gurian et al. (1992) suggested. In our paranoid sample expellees showed a tendency to later marriage, lower birth rate and more frequent childlessness compared to nonexpellees, which would support this hypothesis. The two women who were raped on their flight aborted their children and remained childless, although they later married. This issue would have to be settled by further investigation. Another interesting question would be whether in nonexpelled paranoid patients similar life events can be found that brought them to the position of "outsiders". Thus, in our sample illegitimate birth or children, unfavourable change in social class with marriage, amputations and similar stressful conditions or events were repeatedly conspicuous to have been of comparable importance for personal development.

For several reasons the results of the present study must be interpreted with caution:

1. Case-note data were collected retrospectively.
2. Because of still-unsettled nosological problems about late paraphrenia, all paranoid psychoses of later life were included, resulting in a possibly heterogeneous sample.
3. Because of the lack of further data the life event of expulsion as the predisposing factor in question remains unconnected to patients' later biographical and personal development.

On the other hand, this life event has the advantage that it can be clearly ascertained, thus yielding (contrary to hearing loss, for example) two clear-cut and quantifiable groups, i.e. expellees and nonexpellees. Moreover, the simultaneous expulsion of an entire ethnic group and their resettlement in the same country excludes selection factors that frequently bias studies on migration effects.

Should the results stand the test of replication the biography of late-paraphrenic patients would be of much more etiological importance than has thus far been assumed. This could possibly influence the nosological delimitation from other late-life mental disorders of predominantly organic origin.

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