Brit. J. Psychiat. (1967), 113, 461–469

Late Paraphrenia

By M. E. HERBERT and S. JACOBSON

An editorial in the *British Medical Journal* in 1962 drew attention to the fact that research workers have taken relatively little interest in the psychoses of the elderly. The editorial commented on the important paper by Kay and Roth (1961), which analysed the condition known as "late paraphrenia". Since the publication of this editorial, no significant contribution has been added to the analysis of this illness.

Fish (1960), in a paper describing the incidence of senile schizophrenia in an Edinburgh geriatric series, stated that schizophrenia in old age is uncommon and that cases of "late paraphrenia" are not in fact schizophrenia but are made up mainly of paranoid depressions and organic states. Roth (1955) demonstrated quite clearly that the prognosis for organic senile psychoses, manic depressive psychosis and late paraphrenia is significantly different for all three conditions, paraphrenia having the best outcome as regards mortality.

Roth (1955) writes that his cases of late paraphrenia formed a group with well-organized systems of paranoid delusions with or without auditory hallucinations, these symptoms existing in the setting of well-preserved personalities. In the majority of these cases, the illness commences after the age of 60.

Because the clinical picture in most cases resembles the paranoid illness described by Kraepelin under the heading of paraphrenia, which was subsequently shown to be a late form of schizophrenia, the name "late paraphrenia" was given to this group of elderly patients. They differed from cases of senile psychosis in which transient ever-changing paranoid ideas arise because of poor contact with the environment. Mayer-Gross, Slater and Roth (1960) enlarge further upon the definition of the illness, stating that it occurs particularly in women, and in both sexes among unmarried individuals. Approximately one-third of the cases have severe defects of hearing or of vision, more often the former. This rate is in excess of the incidence found in cases of affective psychosis, and the isolation, hypersensitiveness, and tendency to misinterpretation imposed by such defects may play a part in causation.

To summarize, there exists in old age a group of cases with predominantly paranoid symptoms of a highly systematized quality, usually arising in the latter part of the seventh decade.

Hill (1962) has emphasized that the complex concepts with which psychiatry deals, such as schizophrenia, are nothing but adjectival nouns to describe patterns of human behaviour, and should never be considered as "things"; nor can they be considered as aspects of an individual's behaviour without relevance to the social environment in which he or she behaves.

The term "late paraphrenia" would, therefore, be appropriately given to a set of symptoms and abnormal behaviour patterns which arise in a vulnerable personality when subjected to certain stresses in the senium.

We attempted to assess the sort of personality that succumbs to this illness, as well as the stresses to which that personality is subjected, among the geriatric patients admitted to St. Francis Hospital.

Material and Method

Our investigation included all patients over the age of 65 years admitted to St. Francis Hospital between 1 October, 1958, and 30 March, 1964. The diagnosis of paraphrenia was made only after careful and prolonged observation, often over many months. In addition, a married couple who were seen as out-patients were investigated because of their special interest as an instance of folie à deux.

Our criteria of selection were:

1. Over the age of 65 on admission.

2. Presence of systematized delusions with or without hallucinations in a setting of clear consciousness.

3. Onset of illness in late middle age.

4. Cases of serious dementia were excluded (although cases of paraphrenia as they age may develop dementia).

5. Chronic schizophrenia persisting into the senium was excluded.

6. The patients might have had abnormalities of personality in earlier life but these had not been sufficient to prevent them from coping with their environment before the onset of the present symptoms.

Results

Sex Distribution

In all 45 women and 2 men fulfilled the diagnostic criteria. One of the women and one of the men constituted a pair of folie à deux.

Of the two males where the diagnosis was established, one, aged 74, had a chronic lung condition with some evidence of Parkinsonism. Psychological as well as clinical investigations failed to elicit signs of dementia. His history extended over two years, and he died 18 months after admission. The other male, a partner in the folie à deux was aged 84. Clinical examination failed to demonstrate dementia. His history extended over 18 months, and he was under the dominance of his wife's severe paraphrenic delusions and hallucinations.

The incidence of paraphrenic illness in aged males in our series is low. Kay and Roth (1961) found 12 males in their series of 99 cases from Scandinavia and from Graylingwell Hospital, but only 3 of their cases were from Graylingwell. Fish (1960) cites 2 males in a total of 7 "senile schizophrenics".

In the following series the 45 women only are analysed.

Age Distribution

Table I
Age on Admission

65 – 69	9
70 – 74	10
75 – 79	13
80 – 84	9
85+	4

On the whole the age distribution on admission is fairly even for all decades.

Marital Status

Table II

Married	8 cases
Widowed	22 cases
Single	13 cases
Divorced, separated, living apart ..	2 cases

Among the 8 married women, 2 were very deaf, 2 were completely blind, one patient's husband was blind and very uncompanionable, and another patient's husband was a chronic invalid with carcinoma of the lung. In one case the marriage had been singularly unhappy and incompatible throughout. One woman, the partner of the case of folie à deux, had a feeble spouse twenty years older than herself, who was subjected to her mental aberrations. Strong evidence of lack of companionship could usually be found by further exploration.

Children

Table III

Having 1 child	9
,, 2 children	4
,, 3 ,,	8
,, 4 ,,	1
,, 0 ,,	23

The comparatively low number of children born in this series agrees with the findings of Kay and Roth (1961). In their series, 45 per cent. of their ever-married cases were childless. In 21 out of 32 of our ever-married cases, children did result and survive the marriage. However, 33 per cent. of the ever-married were childless.

Six widows out of 22 were childless, 8 ever-married women each had 3 children. A lack of children can be attributed to various causes. Thus, in one case a widow had 4 children who died in infancy. Many patients did not marry till late in life for various reasons, including personality difficulties, and were then too old to have children.

Familial Illness

TABLE IV

Schizophrenia	8
Depression	3
Character Disorder (Psychopath) ..	6
Alcoholic..	2
Diagnosis not known ..	4
	23

It is, of course, very difficult to obtain reliable data about the family histories of elderly patients, though every effort was made.

Negative family histories were obtained in 28 cases, almost two-thirds of the number investigated.

Some points do emerge from this information, namely the incidence of illness in the fathers of patients. Of the 8 fathers (17·8 per cent.) suffering from some mental disturbance, 6 had personality disorders and 2 were alcoholics. Two mothers (4·4 per cent.) had schizophrenia. Of 233 siblings among our 45 cases, we found that 6 (2·3 per cent.) suffered from schizophrenic illness. The family histories indicated other mental disorders apart from schizophrenia. In this series, personality disorders (psychopathic personalities) and schizophrenia are the mental disorders most likely to occur in the families of patients who suffer from late paraphrenia, but in the majority of cases no hereditary or familial incidence of any kind of mental disorder is present. However, the overall incidence of abnormality in the families is higher than in the community at large, taking a random sample.

The nature of schizophrenic illnesses in the mothers and siblings of our cases, i.e. 8 in all, is of some interest. In the case of the two mothers, both developed symptoms of persecution and auditory hallucinations after the age of 60. One died in a mental hospital after several years, the other died at home well into her 70's. In the siblings, two women had illnesses starting over the age of 60, both of them being hallucinated with persecutory delusions. One patient, a male, was a simple schizophrenic with progressive inability to work, who kept drifting about the town and returning home after long absences. His illness was recognized in the second decade of his life. Three remaining patients were paranoid schizophrenics, commencing their illnesses in the third decade, and requiring admission to mental hospitals. Two of these were women, one a man. All three of them suffered from bizarre persecutory delusions and auditory hallucinations.

The Incidence of Physical Disease

As late paraphrenia occurs in people liable to suffer the physical disabilities of old age, it is not surprising to find a large incidence of physical ailments present in this series (Tables V and VI).

TABLE V

Cardiovascular Disease	15	Dermatological	1
Arthritic	10	Neurological	1
Respiratory	2	Nutritional, including anaemia	4
Endocrine	1	Other illnesses	4

TABLE VI

(a) *Visual Loss:*		
Total blindness	4	
Near blindness both eyes	4	
Severe loss of vision one eye	9	
Moderate loss of vision due to cataracts	4	
Total	21	47 per cent. of all cases
In 12 cases, i.e., 27 per cent., critical visual defects in both eyes were present.		
(b) *Auditory Loss:*		
Almost total to total deafness	10	
Moderate deafness	8	
Total	18	40 per cent. of cases
Serious combined visual and auditory loss	10	

Thus there was a total of 39 cases with either visual loss or auditory loss or both.

Minor visual and auditory defects were excluded.

https://doi.org/10.1192/bjp.113.498.461 Published online by Cambridge University Press

Previous Mental Illness

The past histories of patients were carefully scrutinized for evidence of previous mental illness.

TABLE VII

	Cases
Depression	4
Paraphrenic and Paranoid illness	3
Tension state	1
Unknown	1
Total	9

In the four cases of depression, this illness had occurred 25, 18, 14 and 6 years previous to the onset of the paraphrenic disorder. The "Tension State" and the "Unknown" illness had occurred several years before the onset of the paraphrenic illness.

In two patients, paraphrenic or paranoid illnesses were in evidence 4 years and 3 years episodically before the final illness set in. One patient aged 82 gave a history of paranoid illnesses in her teens and in her forties, both of which cleared up spontaneously and may have been largely depressive in character. Kay and Roth (1961) described the progressive non-remitting quality of the illness once it develops, but perhaps remission may occur in the early phases as in some cases of schizophrenia in early life.

Previous Personality

We approached this investigation as clinicians working in a mental hospital and we did not apply personality inventories. Instead, we attempted to assess patients on the basis of clinical data. The following descriptions of the patients previous to illness were gathered with the assistance of psychiatric social workers and from people who knew the patients previous to their admission to hospital. It was difficult to get an accurate assessment of previous personality, because in this age group few contemporaries are available for obtaining information.

A wide variety of personality traits which overlap may characterize the premorbid personality. Most of these traits could be grouped as either paranoid or schizoid (see Table VIII). Only four cases were described as cheerful, sociable persons before their illness, and without abnormal traits.

TABLE VIII

		Cases
Quarrelsome-aggressive-hostile	(Paranoid)	13
Egotistical-obstinate-domineering	(Paranoid)	17
Suspicious, jealous, persecuted	(Paranoid)	11
Shy, reserved, withdrawn	(Schizoid)	15
Fastidious, fussy, overtidy	(Obsessional)	4
Religiose, spiritualistic, sectarian	(Schizoid)	6
Eccentric, odd, cranky	(Schizoid)	4
Cheerful, sociable, warm	(Normal)	4

Contributory Factors Found in Association with Paraphrenic Illness

In this series of paraphrenic cases, we found various factors were associated with the onset and development of the illness (see Table IX).

TABLE IX

Physical Illness	10
Loneliness	18
Bereavement	9
Moving Home	4
Retirement	1
Unknown	3

The histories of these patients indicated that the illness did not develop *de novo*, but that the onset occurred against a background of disturbance sufficiently strong to disrupt the personality.

Lack of social contact was common. Eighteen patients lived in lodgings or homes rarely visited by anybody; they were single or widowed, without responsible relatives taking any interest even if they were still alive; friends and even neighbours tended to ignore these women, perhaps because of their personality difficulties. Their lack of contact with people intensified their personality defects and increased their withdrawal into delusions and hallucinations. Bereavement and moving home produce severe and sudden disruption of social contact.

Symptomatology

TABLE X
Symptomatology

Hallucinations:	
Auditory	32
Visual	18
Tactile	6
Gustatory	2
Olfactory	2
Delusions:	
Persecutory	32
Erotic	12
Grandiose	4
Poisoning	8
Hypochondriacal	2
"Partition"	15
Behaviour:	
Aggressive	6
Excitable	24
Quiet, apathetic, withdrawn	10
Clean-tidy	14
Dirty-unkempt	11

From Table X, the commonest symptoms are auditory and visual hallucinations, persecutory delusions, "partition" delusions and states of excitement. We have used the term "partition" delusion, by which we mean the belief that somebody or something is operating in the ceiling above, the floor below, or beyond the wall separating an adjacent room and is interfering with the patient's life and circumstances, e.g. hearing tape-recorders in the room above, people downstairs removing utensils, plugging radios to tap information, people in the next room shifting furniture to annoy the patient. The patients remain quite clear and remarkably lucid, unless, with further senile changes, dementia sets in. Memory usually remains unimpaired, but affect is often blunted. Patients may be admitted because of acute excitement, but they soon settle down into an orderly pattern of behaviour with perhaps episodic explosiveness. Excitement is a combination of anxiety, anger and aggressiveness, and often brings the patient into contact with the police.

The Electro-encephalogram and Cerebral Disease

Obvious gross cerebral disease with severe neurological symptoms and signs were excluded, so was obvious dementia, but two patients with a history of strokes without residual signs were included. One case of a moderate degree of Parkinsonism was included in this series of cases. The possibility of organic cerebral disease without obvious focal neurological signs must be borne in mind in an elderly series. Controversy occurs in the literature as to the relevance of organic cerebral disease in the aetiology of paranoid states and paraphrenia. Fish (1960) found organic factors very significant in his series of senile paranoid states in Edinburgh.

To establish the presence of organic disease we had EEG's performed on co-operative patients free of drugs. There were 19 cases in all. In the 19 cases normal EEG's were found in 8 cases (43 per cent.) and abnormal EEG's in 11 (57 per cent.). The abnormality was non-specific and had no relevance to the clinical picture of paraphrenia, but correlated with the longevity of the patient and with the subsequent onset of dementia. Thus, 7 cases with abnormal records had a history of 10 years or more, and in only 2 cases with normal records was there a history of 10 years or more. With illnesses of less than 10 years' duration, 6 cases had normal records and 4 cases had abnormal records.

Duration of Illness

TABLE XI
Duration of Illness

	Cases
More than 10 years	13
5–10 years	13
2–4 years	8
1–2 years	7
Less than 1 year	4

In all cases investigated the onset did not occur before the latter half of the sixth decade. Paraphrenic illness tends to be chronic, with poor prognosis as regards complete recovery. However, as we shall see indicated below, the persistence of symptoms need not lead to permanent hospitalization.

TABLE XII
Therapy

Stelazine	38
Largactil	11
Tofranil with Largactil ..	3
E.C.T.	4

There can be no doubt about the general usefulness of the tranquillizers, at least in controlling the explosive symptoms of aggression and irritability. They also helped in promoting the discharge of the patients and in keeping some who were discharged, out of hospital. We did not have complete follow-up information on all patients, but in those who did attend follow-up clinics the benefit of the tranquillizers, especially Stelazine, usually combined with Disipal, is impressive. Depressive symptoms were treated with either Tofranil or E.C.T.

Mental Welfare Officers and general practitioners help supervise the administration of drugs. Discharged patients are seen regularly at follow-up clinics if possible.

Progress

Of 45 cases admitted, 29 cases were discharged. Of these, 14 had to be readmitted within six months, but after a short stay, 8 were able to be discharged again. Within one year, 2 cases were readmitted and within two years 1 case was readmitted. Sixteen cases remained in hospital, but in this group 10 were by now over 75 and showing considerable intellectual deterioration.

There were 8 deaths (17·5 per cent.) with an average age of 79 years, 6 cases died in hospital and 2 cases died out of hospital subsequent to discharge. This rate agrees with the observations of Kay and Roth.

TABLE XIII
Disposal

Discharge to own home	14
,, to relatives, friends or landladies	9
,, to welfare houses	6
Remained in hospital	10

DISCUSSION

Schizophrenia is considered by almost all authorities to be a condition that arises at any time of life. The term schizophrenia has become a word of everyday usage, as well as a concept very dear to the diagnostic acumen of the psychiatrist. Hill (1962) and Laing (1960) express doubt as to the actual existence of the condition as a clearly defined clinical concept without relevance to the social environment in which the patient behaves. Nevertheless, psychiatrists continue to diagnose and treat a condition about which they have reached a large measure of common agreement, and recognized as schizophrenic illness.

Kay and Roth (1961) used the term "late paraphrenia" as a suitable descriptive term, without prejudice to aetiology, for all cases with a paranoid symptom-complex in which signs of organic dementia or sustained confusion were absent, and in which the condition was judged from the content of the delusional and hallucinatory symptoms not to be due to affective disorder.

However, the psychiatric observer creates his own clinical criteria by limiting and defining the scope of his observations. When the schizophrenic process is confined by observers to a younger series of cases, the observations may yield a clinical entity different in some respects to that seen in older patients. Paraphrenia was the term employed to cover schizophrenia occurring in the fourth and fifth decades. Kay and Roth (1961) extended it to cover the condition occurring in the seventh or eighth decades, and called it "late paraphrenia". Even Kay and Roth's views and conclusions were to some extent coloured by the fact that many of their patients (41 out of 99) were less than 65 years of age. Naturally their findings would tend to differ over all from a series containing an older range of patients such as our own. In older patients the ageing process may be even more decisive as an aetiological agent. The physical as well as the social aspects of senescence are bound to present a different overall clinical picture.

We followed the diagnostic criteria laid down by Kay and Roth, except that in the older

patients we found frequent organic cerebral changes develop in advanced age.

The low incidence among males in our series is striking. There were only 2 cases in a series totalling 47 cases. Kay and Roth (1961) collected 12 cases in their combined Graylingwell and Stockholm series. Out of 42 cases in their Graylingwell series there were only 3 cases, supporting a very low incidence of late paraphrenia in the male population.

The high incidence of the disorder in relation to the single state is apparent. The state of living without a spouse may very often restrict the social communications of the person, and in the elderly widow this is undoubtedly the case.

Lack of children produces loneliness in old age. In this series 24 patients (53 per cent.) were childless; it was the single state rather than a lack of fertility which led to childlessness, but many of the marriages that did take place occurred late in life, perhaps because of personality difficulties of no specific quality.

The degree to which physical ill-health plays a part in upsetting the mental tranquillity of patients cannot be calculated, nor should it be underestimated. Townsend (1957), and Susser and Watson (1962), describe the physical hardships, sickness and social isolation and bereavements which are the major crises of old age. Susser and Watson describe the three aspects of isolation in the aged of all kinds, under the headings of social isolation through separation from social contacts and social services; physical isolation in separate households; and emotional isolation arising from subjective feelings of loneliness and desolation. Elderly people with physical disabilities must restrict their social communication with a resulting tendency to diminish social contact and responsiveness. Kay and Roth (1961) stated that in their series acute physical illnesses and operations were rare. They thought that disturbances affecting the balance and regularity of domestic life were commoner. We agree with their observation for younger paraphrenics, but we should like to stress the need for a careful exploration of even minor physical ailments forming a nucleus for anxious preoccupation and social retreat in older paraphrenics. Certainly in our series physical ailments loomed large.

Visual and auditory hallucinations were often stimulated by perceptual impairments. The flashing of lights, the movements of threatening figures, the sounds of radio, the disturbances of ominous machinery and many of the hallucinatory experiences could be partly attributed to these perceptual defects. Tinnitus as an accompaniment of deafness was often associated with "machinery", "lorries", etc.

There can be little doubt that the misinterpretation of common experiences, due to visual or auditory loss, is further aggravated by the ageing process. The constant exclusion from the critical company of others, which should serve as the corrective for misinterpreted experience, as well as the absence of the geniality and warmth of an emotional relationship with others at this age when helplessness and inadequacy increases, make it logical to conclude that the physical handicaps of illness, blindness and deafness play no small part in the genesis of the disorder.

The abnormality of EEG's is non-specific and appears due to age creating organic changes. Maggs and Turton (1956), in their survey of EEG's in people over the age of 60 suffering from delusions, found the same number of specific abnormalities as in normal controls.

Lastly, an important contribution towards the development of the illness is undoubtedly the personality structure of the affected person. The high incidence of psychopathy in the fathers (17·8 per cent.), the relatively high incidence of schizophrenia in the mothers (4·4 per cent.), and in the siblings (13·3 per cent.) would indicate constitutional defects in the families of late paraphrenics. Personality traits vary widely among the general population, and it would still need a serious investigation to assess and prove that any trait or combination of traits is specific to any form of mental illness. Kay (1959) has shown that a high proportion of late paraphrenics have a frequency of personality variants of the schizoid type and that there is also a preponderance of unmarried individuals. Our investigation inclines us to the view that a "difficult" personality may be robust enough to cope with life until the onset of senescence, but the difficult personality fre-

quently contains paranoid, or schizoid personality traits or both before the onset of illness. It is also likely that as their circumstances of life change in old age, so personalities may in turn develop subtle changes. Birren (1964) has pointed out the difficulties in assessing personality types in advancing age. He states that there develops a quality of affective detachment from the environment in which older persons have less ego involvement in their roles and activities, a consequence of reduced "ego energy". He further indicates that the internal systems that provide adaptation are not fully known, and successful adaptation may be brought about by quite different and almost opposite types of personality organization. The role of personality in determining the genesis of late paraphrenia has not been ascertained with any finality, and our own rough clinical assessments do not support any specific personality traits or types, but undoubtedly abnormal personality traits are associated with the development of late paraphrenia in senescence; especially paranoid and schizoid traits.

Chronicity in late paraphrenia may have much to do with the long periods of loneliness and with the ominous threat of its limitless duration. Profound fear of insecurity caused by isolation from individuals and groups in the community may give rise to the morbid quality of the delusions. Laing (1960) stresses the existential concept of "engulfment" in the evolution of schizophrenia. He states that it is necessary for the individual to have a firm sense of identity in order to relate to other people. In senescence, in certain people, the sense of personal identity may be entirely undermined by physical handicap, by social isolation and by abnormal personality traits. The patient is "engulfed" by his misapprehensions about the nature of his environment and his fellow-beings and succumbs to fearful fantasies in the form of delusions and hallucinations.

The effect of treatment by tranquillizers and the care administered in the community gave hope to many of them.

Summary

1. A group of 45 women suffering from "late paraphrenia" is examined. The infrequent incidence in males is mentioned.

2. The incidence of physical illness, perceptual loss, electro-encephalographic changes, the social isolation from family and community life are described.

3. An assessment is made of the constitutional factors, analysing the incidence of hereditary illness and the personality traits of the patients.

4. It is concluded that the patients suffering from late paraphrenia have a high incidence of hereditary defects and abnormal personality traits, and that stressful environmental factors late in life operate upon their biological weaknesses to produce this illness.

5. Observations were made on some beneficial effects of tranquillizers and of community care, and it is considered that life out of a mental hospital was possible for many of the patients for varying lengths of time, provided they were not demented.

Acknowledgments

We wish to thank Dr. W. A. Kennedy, the Head of the Department of Electroencephalography, Hurstwood Park Hospital, for his interpretation of the EEGs; Miss J. N. Wilson, Psychiatric Social Worker, for her assistance on social reports; and Mrs. E. Peirce and Mrs. P. Horton for typing the manuscript.

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(*Received 2 August, 1966*)