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Obsessional Neurotics

A Long-term Follow-up

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Introduction

In a paper in the *American Journal of Psychiatry*, Chapman (1963) states categorically that no extensive follow-up investigations of neurotic patients exist. So long as we do not know the prognosis of neurotic illness, every evaluation of the results of therapy is impossible. Most psychiatrists feel that they help their patients, but one does not know with certainty.

The picture is not so dark as the American author paints it. Some investigations do in fact exist, most of them from European countries, but it must be admitted that follow-up studies are rare and those under discussion are not always commensurable. The dearth of comprehensive data, especially regarding the natural history of neurosis, is reflected in most current textbooks of psychiatry.

Earlier Studies

The following studies deal in particular with the prognosis of obsessional neurosis: British works by Lewis (1936), Pollitt (1957) and Ingram (1961), Swiss studies by Müller (1953, 1957), German studies by Rüdin (1953), Danish works by Balslev-Olesen and Geert-Jörgensen (1958), and from Norway the paper by Langfeldt (1938). Roughly speaking, these studies seem to show that the prognosis of obsessional illness is worse than for other neurotic illnesses, but the picture is less gloomy than it is painted in many textbooks.

Lewis (1936) studied 50 obsessional neurotics, both in- and out-patients. Most of them were followed up for more than 5 years after treatment. Sixteen were then described as quite healthy, seven were much improved, five had been fairly well for some years but had relapsed, and 17 were unchanged.

Langfeldt (1938) investigated 35 obsessional neurotics (psychopaths) and 17 psychotics with distinctive obsessional symptoms. The follow-up was from 1 to 11 years. Some were re-examined personally by the author, others with questionnaires. The observation period was short for evaluation of the prognosis, but the author found that of the 27 genuine obsessional neurotics, seven were quite healthy, 11 were better, some of them much improved, whereas nine were completely uncured.

Müller (1953, 1957) was able to contact 57 out of 84 former in-patients, most of them 20 to 30 years afterwards. The mean age at follow-up was 55 years. Sixteen of these 57 patients were without symptoms, more than half of them had improved; seven patients had developed schizophrenia, a remarkably high proportion. The author found that in all cases the course of the disease was mostly insidious without conspicuous phases, intervals or change of symptoms.

Rüdin (1953) studied 102 in-patients and 28 out-patients with main emphasis on hereditary questions. Her sample was rather heterogeneous because she included 25 doubtful cases, probable psychotics, and 13 cases which at first were diagnosed as obsessional neurosis but later on became psychotic. The follow-up period was in most cases 2 to 5 years, but in 30 cases 20 years or more. In one-third of the cases the course was slowly progressive, in another third the condition was stationary and in the remainder there was clear improvement.

Pollitt (1957) investigated 150 patients of whom 69 had been in-patients and 81 treated in private practice. He established contact with 101 of the sample, but had to rely on questionnaires in some cases. The follow-up time was from 3 months to 15 years, the mean time being 3·44 years. Thirty-four of the patients had been

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leucotomized by the time of the follow-up. Of the operated cases, one had committed suicide; 15 were described as free of symptoms with good social adjustment; six had slight symptoms but were socially well adjusted; seven had had some improvement, as far as symptoms are concerned, but with bad social adjustment; five were impaired or in the same condition as before. Of the 67 patients not leucotomized, 16 were without symptoms with good adjustment; 24 socially adapted but still experiencing mild symptoms; eight had some improvement in symptoms, but were socially badly adjusted; 17 were worse or unchanged; one had developed schizophrenia.

Balslev-Olesen and Geert-Jörgensen (1958) investigated 62 representative obsessional neurotics with a follow-up from some months to eight years. Ten of these patients were leucotomized, and of them eight were substantially improved and two unaltered. Of the 52 non-leucotomized, 17 were described as unchanged, 33 as improved and two worse.

Ingram (1961) investigated 89 patients, most of them ordinary obsessional neurotics; but some doubtful schizophrenias and depressive conditions with outstanding obsessional features were also included. The author studied 72 per cent. of the sample, and the follow-up period was from 1 to 11 years after treatment in mental hospital. The follow-up was here, as in the previous study, to a large degree based upon questionnaires answered by the patients and on information from doctors; only in a few cases had the author re-examined the patients personally. Of the 18 leucotomized cases, ten had improved, four developed schizophrenia, but all of these were from the beginning in the doubtful schizophrenic group. Of the non-leucotomized patients, 39 per cent. improved with satisfactory social adjustment; 61 per cent. were unchanged or impaired. The phobic cases seemed to have the best results.

As shown here, the follow-up studies of obsessional illnesses are few, and those available are not directly comparable. In several enquiries the follow-up period is short, and the results are perhaps to some degree unreliable as the patients have not in all cases been personally re-examined by the authors.

The Present Investigation

The investigation is essentially a descriptive study of the course and outcome of obsessional illness. It should have two advantages compared with other investigations, namely that practically all the patients were personally re-examined by the author during the follow-up, and that the time of observation was a long one, from 13 to 20 years after admission to one special hospital.

Definition

Some clinicians group phobic patients within the anxiety states, and Freud himself called the phobic an anxiety hysteric. The author has chosen to include them in the sample. For this study, an obsession was defined as a recurrent or persistent thought, image, feeling, impulse or movement, which is accompanied by a sense of subjective compulsion and a desire to resist it; the event being recognized by the individual as foreign to his personality, and into the nature of which he has insight. The present material is therefore separated from the psychoses and the organic brain disorders.

Some of the patients during their stay in hospital were classified as psychopaths, according to the view expressed by Langfeldt (1954), i.e. if the clinical syndrome had been very severe, if it had lasted for a long time, as a rule from childhood, and if one had the impression of hereditary tainting. As little is known about aetiological factors, the present author prefers a diagnostic classification based upon phenomenological description, as formulated by Vangaard (1958) among others. Following this concept, none of the patients in this sample have displayed psychopathic behaviour, except perhaps two of them and only the diagnosis of neurosis will be used.

Case Material

The material of this study consisted of first admissions to the University Psychiatric Hospital, Vinderen, Oslo, during the period from January 1st, 1943, to December 31st, 1949, with phobic or obsessional neurosis (psychopathy) as the main diagnosis. The hospital has 90–100 beds, half for each sex, and receives patients

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from the whole of Norway, but particularly from the districts around Oslo. Obsessional and phobic patients were found to constitute rather a small proportion, viz. 2·5 per cent. of all patients admitted, or 4·3 per cent. of the neurotic and psychopathic group.

As Norway is a country with a rather scattered population, the investigations were restricted to Eastern and Southern Norway south of Trondheim. Of the 100 patients domiciled in this area out of a total of 122 for the whole country, one had emigrated to another country, one had moved to Western Norway, and seven for various reasons could not be traced. Thus the sample under discussion consists of 91 patients. There were 55 males and 67 females in the initial material, and 38 males and 53 females in the follow-up group.

Method

The main purpose of the study was to investigate the prognosis of obsessional illness and, if possible, to find out whether there is any connection between such factors as childhood conditions, premorbid personality, symptomatology and the outcome of the neurosis.

All the patients' case histories were first studied and the most important points drawn up in a new record. Symptoms at time of admission were in most cases fairly well described; but information on other points such as childhood conditions was in many cases thin. These gaps had, as far as possible, to be filled in during the re-examination of the patients.

Most of the patients were visited in their homes, which is helpful in getting to talk with relatives and in forming an impression of the atmosphere in the family. As a rule the interview lasted about two hours. If the patient was living in a family, in most cases I spoke first with the patient alone, then with the spouse or other members of the family; and sometimes the visit was rounded off by talking to both of them together. In a few cases it was difficult to meet the family members separately, and intimate questions had to be left out. In these and other cases, however, the patients were written to afterwards; in a few cases they also came for psychotherapy. The information reported in the present paper should therefore be fairly reliable. All the items of knowledge thus obtained from the hospitals' case histories, from schools, from doctors and hospitals and from my own personal interview were then transferred to punch-cards and analysed in the Institute for Social Research, Oslo.

The Control Group

In this present study we do not, of course, need any control for investigating the prognosis, but if we are interested in examining aetiological factors, then a control group becomes more necessary. The control group used in this study is not entirely satisfactory. A random sample was taken of patients admitted to the hospital during 1961–1963 and examined by the author, with a diagnosis of neurosis or psychopathy other than phobic or obsessional. In other words the control material consists mainly of patients with anxiety states and hysterical and depressive neurotics. The proper course would have been to take a control group of patients of other diagnostic categories admitted to the hospital in the same period as the original sample. This would, however, have taken a long time, and would have involved follow-up studies of these controls too.

Results

Social Class—Father's Profession

There is no significant difference in this sample between the obsessionals and the control group with regard to social class. If, however, we look at the occupation of the fathers, we find that ten of the fathers in the control group are seamen, compared with none in the obsessional group. This difference is statistically significant (the observed difference is 3·2 times its standard error).

Family History

In the obsessional group 43 of the fathers are described as nervous, seven as obsessive and the rest as nervous in some other way. Nearly half of the mothers, namely 44, were also described as nervous. Of these, 11 are characterized as obsessive, seven as anxious, five as hot-tempered,

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and the rest as nervous in other ways. Both parents were markedly disturbed in 17 cases.

There is some evidence of more pathology in the obsessional group than in the control group, and of accumulation of overt obsessive traits in the same class. This difference is highly significant if one groups together the obstinate, the pedantic and the parsimonious (56 and 14, the observed difference is 4·1, its standard error). There is no difference worth mentioning with regard to other traits.

Patients in most neurotic groups grew up in seriously disturbed families. There is a suggestion that the parents of the obsessionals are more authoritarian than parents of the controls, whereas the families of the controls are more marked by insecurity. The toilet and other forms of training seem to have started at an early age in the obsessional group, but the data on this point are not quite reliable.

Divorce and separation of the parents were found in 7 per cent. in the obsessional group and 10 per cent. in the control group.

Four of the obsessionals were brought up in institutions or by relatives; the number in the control group is seven.

Premorbid Personality

Most of the patients in both groups were nervous as children, namely 83 per cent. of the obsessionals and 72 per cent. of the controls. Table I gives the distribution of the most prevalent symptoms. Most of the patients had more than one symptom. The prevailing symptoms in both groups are of a phobic, anxious and sensitive nature. The obsessionals seem to have been more hot-tempered and obsessive than the control group, but in other respects there is no significant difference. Very few patients give a history of marked psychological trauma in childhood, Among the obsessionals, five females and one male went through distinct sexual traumata, whereas none of the controls have reported such experiences. Other traumatic experiences affected one in the obsessional group and five in the control group.

TABLE I

Symptoms in Childhood

	Obsessionals	Controls
Phobic symptoms	35	26
Hypersensitivity	30	14
Anxiety	28	27
Inhibition	20	15
Obsessiveness	18	4
Shyness	15	6
Enuresis	14	8
Hot-temperedness	12	1
Headache	10	4
Nail-biting, finger-sucking	8	11
Aggressive behaviour	4	2
Sleeping disturbances	4	1
Abdominal symptoms	4	10
Obsessional acts	3	—
Stealing	2	2
Obsessional rumination	2	—
Stuttering	1	2
Obstinate, difficult	2	—

The writer has tried to assess the patients' personality with regard to intelligence, introversion and obsessive behaviour. As a rule no tests were used. No difference between the groups is found with regard to introversion/extraversion, and the obsessionals do not seem to have been especially introverted before the onset of their main illness. The obsessionals were significantly more obsessive premorbidly than the control group (Table II: $\chi^2 = 7 \cdot 82$, 2 d.f. $0 \cdot 01 < p < 0 \cdot 05$), but 28 per cent. had no obsessional traits before breakdown. Most authors seem to acknowledge the classical triad of Freud, namely orderliness, frugality and obstinacy, by analysts called "anal-erotic" traits, as the most distinct obsessive traits (Ingram, 1961). Looking for each of these traits one finds that 72 per cent. were marked by more

TABLE II

Obsessive Premorbid Traits

	Uncertain	None	Moderate	Extreme	Total
Obsessionals	2	25	49	15	91
Controls	10	38	38	5	91

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than usual orderliness, 24 could be characterized as normal in their attitude towards orderliness, whereas the rest (4 per cent.) were marked by unusual disorderliness. About half of the obsessional patients could be grouped as very frugal, the rest being normal in this trait. Six patients were described as extravagant. About 40 per cent. could be described as very obstinate, another 40 per cent. average in this trait, whereas the rest were unusually easily led.

TABLE III

Other Premorbid Traits

	Obsessionals	Controls
Hypersensitive	65	67
Quick-tempered	25	19
Insecure	17	23
Inhibited	14	12
Emotionally labile	12	4
Anxious	12	11
Dysphoric	9	11
Subject to mood swings ..	5	20
Infantile	2	11

Table III shows the other more prominent premorbid character traits. The obsessionals seem to be more intelligent and they did better in school, but the tendency is not statistically significant.

Onset of Illness

The relationship between onset and age is shown in Figure 1. The distribution is fairly even in men for all ages up to 40, but in women is concentrated in ages 10 to 30.

Half the patients developed their main illness before the age of 20 and nearly 20 per cent. in childhood. Only 4 per cent. started after the age of 35. Of the 28 patients beginning their illness in childhood (before 15 years), 12 had an insidious onset, the rest being more or less acute. More females than males had this acute beginning (not significant at the 5 per cent. level).

The mean age at first admission was about the same for both sexes, 34 for males and 36 for females (see Figure 2).

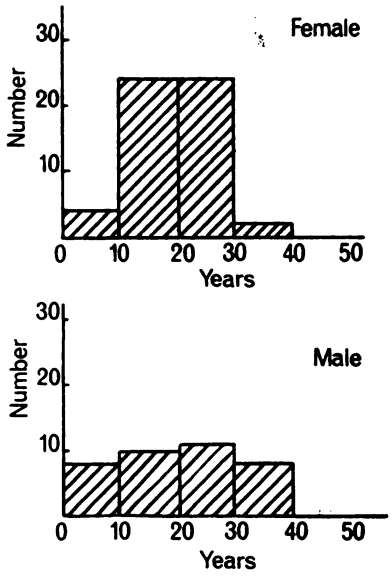


FIG. 1.—Age and onset

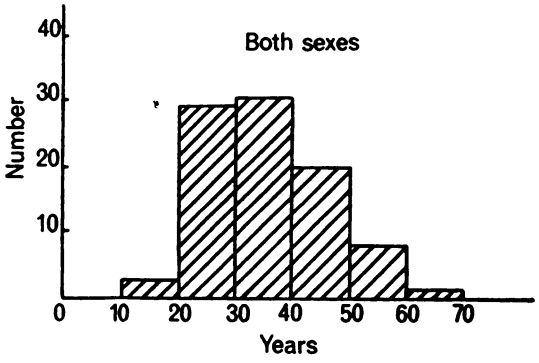


FIG. 2.—Age at admission

The starting symptoms were not only of an obsessional kind, as Table IV shows. More than one-quarter of the sample had also anxiety symptoms and about one-fifth had depressive symptoms. Pains or sensations located to the chest, the abdomen and the head are also common, as are too hypochondriacal and neurasthenic symptoms.

State on Admission

Most of the patients had symptoms other than phobic and obsessional as can be seen from

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TABLE IV

Starting Symptoms

	Male	Female	Total
Obsessive symptoms	19	30	49
Phobic symptoms	21	27	48
Anxiety symptoms	11	15	26
Depressive symptoms	5	12	17
Pains or sensations localized:			
to the chest	8	10	18
to the abdomen	2	4	6
to the head	3	3	6
Neurasthenic symptoms	4	7	11
Hypochondriacal symptoms	7	3	10
Sleeping disturbances	4	4	8
Other symptoms	19	17	36

Table V. There is no significant difference between the sexes. As a rule obsessive thoughts, obsessive behaviour and phobias are all mixed together; in only a few patients was the clinical picture a more clear-cut single syndrome. In ten cases the writer found that the patients were not typical cases, and perhaps some of them ought to be classified under another diagnosis

TABLE V

SYMPTOMS ON ADMISSION

	Male	Female	Total
Phobic symptoms	30	43	73
Obsessive thoughts	25	42	67
Obsessive behaviour	22	32	54
Depressive symptoms	16	26	42
Anxiety symptoms	7	13	20
Somatic symptoms localized:			
to the head	5	7	12
to the chest	3	3	6
to the abdomen	1	4	5
Other symptoms	20	28	48

than obsessional neurosis, although there were many obsessional traits (?). The author's evaluation of the diagnosis is given in Table VI.

In about 50 per cent. of the males and 70 per cent. of the females some emotional stress may be seen to have precipitated the breakdown before admission. It is not possible on the basis of the case histories today to say anything

TABLE VI

Type of Obsessional Syndrome

	Male	Female	Total
Mixture of obsessional thoughts, acts and phobias	13	18	31
Predominantly or solely obsessional thoughts or acts	11	22	33
Predominantly or solely phobias	9	8	17
Atypical obsessional	5	5	10
Total	38	53	91

convincing about the dynamics behind the clinical picture in all cases. In 14 patients, however, three males and 11 females, there were evident sexual problems. In 17 other patients, six males and 11 females, the aggressive problems were outstanding. In the remainder the case histories are so complex or in other cases so lacking in detail that nothing decisive can be said.

In most cases admission to hospital was required for a combination of several reasons. In 38 cases the main reason seems to have been inability to work, in 31 cases obsessional symptoms, in six cases depressive symptoms.

Duration of Stay in Hospital and Therapy

The mean duration was 2·1 months, but more than 20 per cent. were in hospital for less than one month. Many of these patients seem to have left the clinic because they could not bear locked doors.

Most of the patients got some form of somatic therapy, either E.C.T. or drugs. Sixty patients received E.C.T. The few patients who had psychotherapy in most cases received some sort of supportive therapy, a few of them along analytical lines, trying to bring the patient some insight; but none had regular psychoanalysis. The reason why so few patients received psychotherapy seems to be two-fold, lack of doctors available and the prevalent view that psychotherapy is of limited use in these cases.

Fifty per cent. of the patients were unchanged at discharge. The 35 per cent. "slightly improved" consisted of patients who in most cases

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were relieved from their depressive mood but whose obsessional symptoms were unchanged. Nine per cent. were much improved and 5 per cent. worse.

Discussion

The incidence of obsessive and phobic neurosis in this sample is in agreement with other studies, which according to Ingram (1961) show from 0·2–3·1 per cent. of in-patients in psychiatric hospitals.

Most studies report a higher proportion of females (Rüdin, Balslev-Olesen *et al.*, Ingram). Müller, on the other hand, found males in excess.

It is a widely-held view that obsessive behaviour is typically a neurosis of the upper and middle classes. The scientific literature is, however, meagre. Hollingshead and Redlich (1958) in their well-known New Haven study found higher rates of neurosis in the upper classes, though this might represent to some degree the greater ability of these classes to pay for private treatment. Also they found a relationship between social class and types of neurotic reaction: phobic anxiety reactions and character disorders were most prevalent in social classes I and II, while hysteria was found predominantly in classes IV and V.

We found that ten of the fathers in the control group were seamen, compared with none in the obsessional group. This might support the hypothesis that the option of neurotic subtype is a function of family constellation. Law, order, discipline, and taking responsibility are values which belong to the father-world; and one may suppose that it is easier to give the child a strict upbringing when the father is present.

Lewis (1936) found practically no normal parents in his sample of 50 obsessionals. A considerable number, namely 37 of the 100 parents, were characterized as markedly obsessive in one way or another. The author found further that four parents had been psychotic. Rüdin (1953) discovered that 8 per cent. of the parents had pronounced obsessional traits, 3 per cent. were schizophrenic and 12 per cent. suffered from manic-depressive illness.

No parents in the present sample had been psychotic and practically none were described as normal. By and large, this study confirms earlier works, namely that obsessional illness is found in significant concentration in the families of obsessionals. This seems to be a common finding for all types of psychiatric disorder. This finding has been established as a fact for a long time when the psychoses are considered. Recently Ernst (1959), among others, has found the same for various types of neurosis. Some authors tend to interpret this finding as a proof of heredity (Lüxenburger, Lewis and Rüdin). This is, of course, untenable. Family incidence of a psychiatric illness may be the result of social as well as genetical inheritance. Genealogical studies cannot tell what is biologically inherited, but help to clarify the mode of gene action when the hereditary factor is established. The twin method is the only method which can give information about what is inherited. Strictly speaking one knows very little about this point because no large unselected materials of identical twins with the diagnosis of obsessional illness are available.

By and large, the findings are in accordance with common dynamic psychological thinking and the view which is not unusually expressed in modern psychiatric textbooks, e.g. Henderson and Gillespie's (1962), that obsessionals have had a very strict and puritanical upbringing, with much insistence on rectitude and cleanliness.

The present study confirms the observations made by earlier investigators that the majority of obsessionals have been anancasts prior to the outbreak of the main illness, but shows also, as Rüdin (1953) and Pollitt (1960) have noted, that some obsessionals do not show obsessive traits before their illness. Rüdin observed that 30 per cent. had been free of such traits before their illness, Pollitt found 34 per cent. and the present writer 28 per cent.

These findings do not quite support the view widely held that neurosis is an over-emphasis on characteristic personality traits. In some patients it seems to be true, but it cannot be accepted as a general theory. One ought also to stress the fact that obsessional personality seems to be linked with other psychiatric disorders, particularly depressive illness (Lewis, 1934).

The obsessionals were not found to be

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especially introverted before the onset of the main illness, as maintained by Eysenck (1947). The findings are more in accordance with Rorschach's (1942), who maintained that hysterical syndromes were mostly found in the extravert group, whereas neurasthenic symptoms were common in the introvert group. Between these extremities he found the obsessionals.

It is a commonly-expressed view that obsessionals as a rule have above average intelligence (Rado, 1959). The suggestion in the present sample is that obsessionals are more intelligent and do better in school, but the difference between the obsessionals and the control group is slight. In fact one knows very little about this point because of the paucity of systematic studies of unselected samples. Eysenck (1947) observed that the group classified by him as introvert (obsessive-compulsives, anxiety neurotics and neurotic depressives) had a higher mean I.Q. than those classified as extraverted (hysterics and psychopaths). Within the introvert group the obsessive-compulsives scored highest.

The findings are in general in accordance with previous investigations which report that 50–60 per cent. of obsessionals develop symptoms before the age of 20 (Müller, Rüdin, Ingram, and Pollitt). Müller found that most of his cases had an insidious onset, based upon an underlying anxiety.

Follow-up Investigation

The follow-up was carried out at a mean interval of 30 years (range 13 to 65) from the time of onset.

The patients had been in hospital during the years 1943–49 and were followed up in 1962–63, so the follow-up period after their first admission was from 13 to 20 years, rather equally distributed over the years, with mean of 16·6 years.

Thirty-nine patients had been admitted to hospital, and 33 had been treated as in-patients on account of psychiatric illness, during the follow-up period. During this time most of the patients received some form of treatment: 42 by drugs, nine E.C.T., seven psychotherapy, three leucotomy and seven a mixture of several forms of therapy. Very few patients seem to have visited their general practitioner after their stay in hospital. Most of them seem to have become resigned and to have given up the search for help. One has the impression that the few patients who frequently visit their doctor are patients with a more varied symptomatology, often phobics with hypochondriacal features. What these patients ask for is often the reassurance that nothing is wrong, or in some few cases for pills to help them relax, as a rule because of sleeping disturbances.

Outcome after 3 months, 5 years, and 10 years

Table VII shows the outcome of the illness after certain intervals of time compared with the patient's condition during their stay in hospital. There is no significant difference between the sexes.

Table VII

Outcome after 3 months, 5 years and 10 years

	3 months	5 years	10 years
Worse	1	4	8
Unchanged	61	40	33
Slightly improved ..	19	30	28
Much improved ..	9	15	13
"Cured"	—	1	3
Dead	—	1	5
Not known	1	—	—
Total	91	91	91

There is no special age at which the improved patients started getting better. The numbers are, of course, small for a statistical analysis, but there is a tendency for the males to improve between 25–35 years of age, whereas the females in most cases improved between the ages 35–45. A few report, however, that there had been some improvement from the early twenties. Two males and two females gave information about improvement after the age of 60. These last-mentioned patients had, however, also a late onset of symptoms.

Development of Illness

As appears from Table VIII, about 30 per cent. feel that their troubles remain constantly

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TABLE VIII

Type of Development of Illness

	Male	Female	Total
Unchanged since onset ..	10	16	26
Steady improvement after some years without improvement	11	12	23
Varying without complete remission	5	13	18
Phasic course with symptom-free intervals	3	3	6
Steady worsening	1	5	6
Constant improvement ..	3	2	5
Ups and downs, but generally worsening	1	—	1
Information unreliable ..	4	2	6
Total	38	53	91

the same during long periods of years. About 20 per cent. feel that in the long run the condition stays much the same, but they have better and worse periods. Another 27 per cent. feel that their condition stays much the same for some years, but then some degree of improvement takes place gradually. Only 8 per cent. gradually became more ill after their illness had been well established. This point will be discussed later on.

In only one case was there any real change of symptoms, namely in one of the patients who had been leucotomized, who developed a schizophrenic-like disorder. However, in nearly one-third of the patients additional symptoms developed over the years, or symptoms which have been of minor importance became more pronounced. In both sexes the most conspicuous of these was dyspepsia: abdominal pains, acid eructation, constipation. Headache also was a common symptom. One male and one female had typical bronchial asthma and one other male had peptic ulcer, confirmed by X-ray. Three patients had attempted suicide, one of them successfully. Four males and one female drank too much, but could hardly be classified as chronic alcoholics. Three males and two females abused drugs, and one of them had been hospitalized on account of drug addiction.

Working Ability

As known from clinical work and common experience, people with a minor degree of obsessiveness are hard workers. When the neurotic symptoms become more pronounced, however, they may affect the working ability. Only 28 per cent. had never had reduced working capacity on account of their illness, whilst 65 per cent. were impaired to some degree, and 7 per cent. were severely impaired at some time during the follow-up period.

PRESENT STATE

At the time of follow-up six patients were dead. Table IX shows the distribution of symptoms in the remaining 84 cases. Besides these symptoms, many patients felt insecure, inferior and dysphoric, and their relatives complained that in most cases they were difficult to live with because of their irritability.

TABLE IX

Distribution of Symptoms Elicited

	Male	Female	Total
Phobic symptoms	22	36	58
Obsessions	13	30	43
Obsessive thoughts	9	21	30
Anxiety symptoms	11	21	32
Hypochondriacal symptoms	8	14	22
Somatic symptoms	8	13	21
Sleeping difficulties	5	14	19
Sexual disturbances	5	13	18
Neurasthenic symptoms ..	3	14	17
Restlessness	10	4	14
Concentration difficulties ..	5	5	10
Depressive symptoms ..	1	5	6
Psychosis	1	2	3
Borderline-psychosis ..	2	3	5

On comparing the symptoms at admission to hospital with the symptoms of 13–20 years afterwards, one finds that phobic and obsessive symptoms stay much the same, but anxiety symptoms have become more prevalent, and to a lesser degree hypochondriacal symptoms also.

Causes of Death

Three males and three females died during the follow-up period. Their psychiatric illnesses were typically phobic-obsessive. All except one died of somatic diseases, namely chronic

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nephritis, chronic asthmatic bronchitis, paralysis agitans, sepsis and Alzheimer's disease. No connection between the phobia and the organic brain disease could be established in the last case.

One female committed suicide at the age of 56. She was an intelligent woman who from the age of 14 had suffered from obsessive thoughts and phobic anxiety. As a rule patients of this sample had not been admitted to other psychiatric wards before they had been received in this hospital, but this patient had been treated in a mental hospital when 40 years old and before that by psychiatrists and for some months by a non-medical analyst without any effect. She was admitted to our hospital on account of depression with suicidal tendencies. The depressive symptoms disappeared without any specific treatment, but a year later she committed suicide by taking drugs.

Psychosis and Borderline Psychosis

Six cases were found by the follow-up investigation to be suffering from psychosis or a borderline psychosis. They need some comment.

One male was admitted to the hospital in 1948 and discharged with a diagnosis of phobic neurosis. In retrospect there are reasons for suspecting a psychotic development. He was born in 1915 and had always been sensitive, schizothymic and to some degree obsessive. After military service in 1936 he became more nervous and he broke down in 1947. From 1948 he was more withdrawn, depressed, isolated, and without any interest for his surroundings; thought he had contracted tuberculosis. During his stay in the hospital his phobic anxiety seems to have been most striking, but his phobic symptoms seem to have been of a paranoid character and taken together with his withdrawal and his schizothymic attitude, one might say that the case was not a typical phobic neurosis. From 1957 the patient developed symptoms of a psychotic nature. Several times he attempted suicide by hanging; at times he was confined to bed with depressive thoughts; for long periods he was paranoid, convinced that he had contracted intestinal tuberculosis; at one stage he suffered from hallucinations. At follow-up, the patient was found lying in bed, afraid of being alone and of being infected, but at the same time he thought that he was suffering from tuberculosis and he was auditorily hallucinated. The writer holds that to-day he ought to be classified as a paranoid schizophrenia. The patient has had numerous admissions to mental hospitals with a diagnosis varying from reactive psychosis to manic-depressive illness and schizophrenia.

One female patient in this category was born in 1915 and was admitted to our hospital in 1948 and discharged with a diagnosis of severe obsessive neurosis, being overwhelmed by obsessions and phobic symptoms. She was admitted to a mental hospital in 1953 and discharged with a diagnosis of reactive paranoid psychosis. From 1955 on, she developed typical schizophrenic symptoms, persecutory ideas, unmotivated bursts of laughter, emotional blunting and ideas of influence, and she has been several times re-admitted to mental hospitals. When examining the patient's history before admission to our hospital, one clearly saw that her symptoms were more severe than a simple neurotic phobia. She had from childhood onwards been very phobic and anxious, and this anxiety increased from the age of 22. She was afraid of various types of animals, and of getting head-lice, and she developed an obsessive washing ritual. On admission to hospital she did not think she was nervous and she had the feeling that these small animals were creeping around on her head. One is therefore apt to think that the patient had lost her sense of reality and really believed she had got head-lice. The diagnosis ought perhaps to have been paranoid psychosis and not obsessive and phobic psychopathy.

The second female was born in 1917 and was admitted to the hospital in 1945 and discharged with a diagnosis of severe obsessive psychopathy, sub-diagnosis hebephrenic schizophrenia(?). She had been rather nervous as a child, and from the age of 15 she had developed very troublesome obsessive thoughts, later on also obsessions and phobic anxiety. When admitted, she was severely disabled because of her neurosis, her ruminations covered all her life and she was gloomy and depressed. As her condition did not

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change, leucotomy was performed in 1948. After this brain operation she became very aggressive and sexually more free; her obsessive neurosis diminished, however, to some degree. When interviewed in 1962 she behaved curiously, did not reveal active psychotic symptoms, but was emotionally blunted and occasionally displayed thinking disturbances. Clinically the picture much resembled a schizophrenic defect state.

Marital and Social Life

As would be expected, marital adjustment was rather bad. Only 23 of the 38 males and 32 of the 52 females were married. Extremely bad adjustment was found in seven cases, bad in 18 cases and "normal" in 29, whereas only one could be said to have a very good marital adjustment. The group "normal-common" is rather broad, and does not mean that the adjustment is good, but perhaps within acceptable limits. Many of these marriages were highly neurotic in their constellation, but when both of the spouses felt that their marriage was harmonious, the writer has classified it as "normal".

Half of the patients feel that their working capacity is good and not influenced by their nervous illness. Only 19 per cent. are markedly disabled. Of the 15 patients with very bad ability, six were in receipt of municipal support, namely two males and four females.

Nearly 40 per cent. of the patients—13 males and 20 females—were living rather isolatedly without any normal contact with friends or relatives. The enjoyment of life was poor for most of the patients. Most of them felt unhappy every day and felt that because of their restricted way of life they could not participate in social activities. More than 30 per cent. lived a hampered life, and less than 20 per cent. could be said to live an apparently normal social life.

As a rule the whole family is affected by these patients' way of life. The other members of the family, especially the wife or husband, have to follow the odd customs set up by the patient. It is remarkable how often the spouse submits to the patient's tyranny.

Assessment of Prognosis

Table X gives a rough classification of the patients' state of adaptation at the end of the follow-up, 13 to 20 years after their first admission to a psychiatric ward. The writer has tried to take into account both symptoms and social adaptation. The table shows that fully three-quarters are by and large unchanged, whereas the rest are considerably improved, only experiencing mild symptoms.

TABLE X

Assessment of Prognosis

Worse	6	
Unchanged	28	63
Slightly improved	27	
Much improved		19
Dead	6	
Uncertain	3	9
Total	91	91

In the present study some factors which *a priori* might be thought to influence the prognosis have been investigated. By the statistical analysis the sample is divided into two groups; patients who are described as worse, unchanged and slightly improved come into the bad prognostic group, whereas patients described as much improved constitute the good prognostic group.

Obsessive premorbid personality and severe clinical picture at first admission to hospital, both appear to be associated with a poor prognosis to a statistically significant degree. Also associated with a poor prognosis, but not significantly so at the 5 per cent level, are nervousness in childhood and unmarried status.

The following factors did not seem to influence the prognosis at all, namely age of onset, acute or insidious development of symptoms and type of clinical symptoms (predominantly obsessive, phobic, mixture or atypical).

In some cases in the present study it is easy to point out factors which have seemed to be responsible for the clinical improvement. It is,

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however, more difficult to point to factors which seem to maintain the symptoms. One woman improved markedly, for instance, when she moved together with her family from her mother-in-law. One male patient had troublesome obsessive sexual thoughts which for the most part disappeared when he got married. Another man who was forced to work for German soldiers during the last war, improved considerably when he got a new job.

Only seven patients in this sample received psychotherapy. All except one held the view that they had benefited from the therapy, even if their symptoms, as observed by relatives, seem to be much the same in most cases. They felt, however, that support and explanation of the symptoms had taken away some anxiety. One male patient responded remarkably to three sessions which were used mostly for explanations on the intellectual level.

Discussion

The findings are in accordance with those of most other authors. In his follow-up study of 126 neurotic patients, Ernst (1959) included only one typical obsessional who had a severe neurosis and was leucotomized. Pollitt (1957) found that only one patient out of 67 not leucotomized had developed schizophrenia. In Ingram's (1961) sample of non-leucotomized patients not one had become psychotic.

In marked contrast to these findings are Müller's results (1957). He observed that seven of 57 obsessionals had become schizophrenic (three hebephrenic, two paranoid, one catatonic and one simple). In three of the cases there was an insidious course with a change of personality at about 30 years of age; in four cases schizophrenia developed acutely before 20 years of age.

The relationship between obsessional symptoms and psychosis has been poorly investigated, and views vary. E. Bleuler, for instance, assumed a close relationship between obsessional symptoms and schizophrenia, whereas Kraepelin held the view that there was a close connection between obsessive illness and manic-depressive psychosis. Today we know that obsessional symptoms occur in association with psychotic reactions of either kind (Lewis, 1934, 1936).

Stengel (1944, 1957) is one of the few who has investigated this relationship thoroughly. On the basis of his own case material and of studies in the literature, he maintains that the association of obsessional symptoms with schizophrenia is rare among hospital in-patients, but perhaps less rare among schizophrenics at large in the community. The majority of obsessionals who become schizophrenic are of a paranoid type, catatonic types being extremely rare (Stengel, 1957; Gordon, 1926). The author further observed that rapid and malignant personality disintegration was exceptional; a relatively benign development usually led to a remission with only slight or moderate defect. These observations were confirmed by Müller (1957). Stengel, in agreement with Glover (1930), held the view that the obsessional personality structure and symptoms serve as defence mechanisms. The personality of the obsessional neurotic is well integrated and prone to reality testing, and may be able to subdue schizophrenic reactions. The cases described by Müller (1953) lend some support to this hypothesis.

Studies of the factors affecting prognosis are few. Langfeldt (1938) and to some degree Pollitt (1957) considered that obsessional premorbid personality influenced the prognosis in an unfavourable direction, whereas Ingram (1961) could not support this. Early onset of symptoms was regarded as a bad prognostic factor by Strauss (1948) and Ingram (1961). The latter regarded the existence of symptoms in childhood and the occurrence of obsessional acts as both being associated with a bad prognosis. Müller (1957) could not point to any particular factor as having a special effect; but he referred to a number which in individual cases affected the prognosis. Some patients who earlier in life had had an insecure social position got better when their social existence was stabilized.

Like Müller (1957), the present author would point out the significance of ageing, which in some cases seems to have an effect much like a leucotomy, though to a smaller degree. The patients remain as disturbed as ever as they grow older, but in many cases they do not pay so much attention to the symptoms, so that they suffer less. In some cases an event such as

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pregnancy or menopause might worsen the symptoms, while in other cases the patient got better afterwards. One patient may fear delivery and be anxious about the responsibility of having a child. Another patient may feel that menstruation is something dirty and terrible and "prefer" to be pregnant. These problems cannot be discussed along general lines. The circumstances of the individual patient have to be known.

Summary

Ninety-one former in-patients with a diagnosis of phobic and/or obsessional illness (neurosis), admitted to the University Psychiatric Clinic, Oslo, were followed up for 13–20 years after admission. Most of the patients were personally re-examined by the author, usually in the course of visiting their homes.

The sample constitutes a small proportion of patients admitted to the hospital, 2·5 per cent. of all patients and 4·3 of the neurotic and psychopathic group.

The investigation confirms earlier works, that obsessional traits and obsessional illness are found in significant concentration in the families of obsessionals. The study further seems to support the view that obsessionals have received a strict and puritanical upbringing, with much insistence on rectitude, obedience and cleanliness. Sixty-five (83 per cent.) of the patients suffered from a variety of nervous troubles as children. Most of them had obsessional traits prior to their main illness; 25 (28 per cent.) had none. Half of the sample developed their illness before the age of 20; and nearly one-fifth had obsessional symptoms in childhood.

The mean age at first admission was 34 for males and 36 for females, reflecting the long time between the onset of illness and hospitalization. Most of the patients had symptoms other than phobic and obsessional ones at the time of admission. In only a few patients was the clinical picture monosymptomatic; as a rule obsessive thoughts, obsessive acts and phobias are all mixed together. Most of the patients received somatic therapy, particularly E.C.T.

At follow-up, six patients were dead, five from somatic diseases, one by suicide. Six patients were found to suffer from psychosis or borderline psychosis. None of these patients were typical obsessionals; their symptomatology might have led one to suspect a psychotic development at an early stage.

Roughly three-quarters of the sample were unchanged at time of follow-up, one-quarter being much improved.

Obsessive premorbid personality and a severe clinical picture at first admission seemed to give a significantly less favourable prognosis.

It is thought that patients with a typical phobic and/or obsessional neurosis have a relatively early onset of symptoms and a poor prognosis with few remissions and few improvements; development into psychosis, alcoholism or drug addiction is rare; and the suicidal risk is small.

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