

THE AGE FOR NEUROSES

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ALTHOUGH known to occur at almost any age, and to have variable durations (1, 2), clinical psychoneuroses appear to be particularly characteristic of that period of the life span sometimes referred to as early maturity. The age of onset and the course run by psychoneuroses in the absence of treatment have rarely been studied and psychiatric literature, even in this period of scientific medicine, rarely tries to clarify these features of the natural history of neuroses.

Noyes' textbook statement that ". . . most neuroses of adults develop between adolescence and 35 years of age" (3) represents a widely held belief among clinicians.

Direct evidence regarding the age of onset of "most neuroses," however, is not available. Most of the indirect evidence tends to confirm Noyes' statement regarding the age of onset of neuroses; however, it tends simultaneously to suggest an average duration of "most neuroses" somewhat less than might have been anticipated. These facts indicate the need for more reliable direct evidence than has hitherto been available regarding ages of onset and the duration of neuroses.

THE EVIDENCE ON THE PREVALENCE OF NEUROSES

Figure 1 shows the curves which arise when the percentage of persons found to have neuroses in each age group is plotted. It may be seen that the various sources tend to confirm Noyes' picture of many neuroses having their beginning before the age of 35. The decline after the thirties is equally prominent.

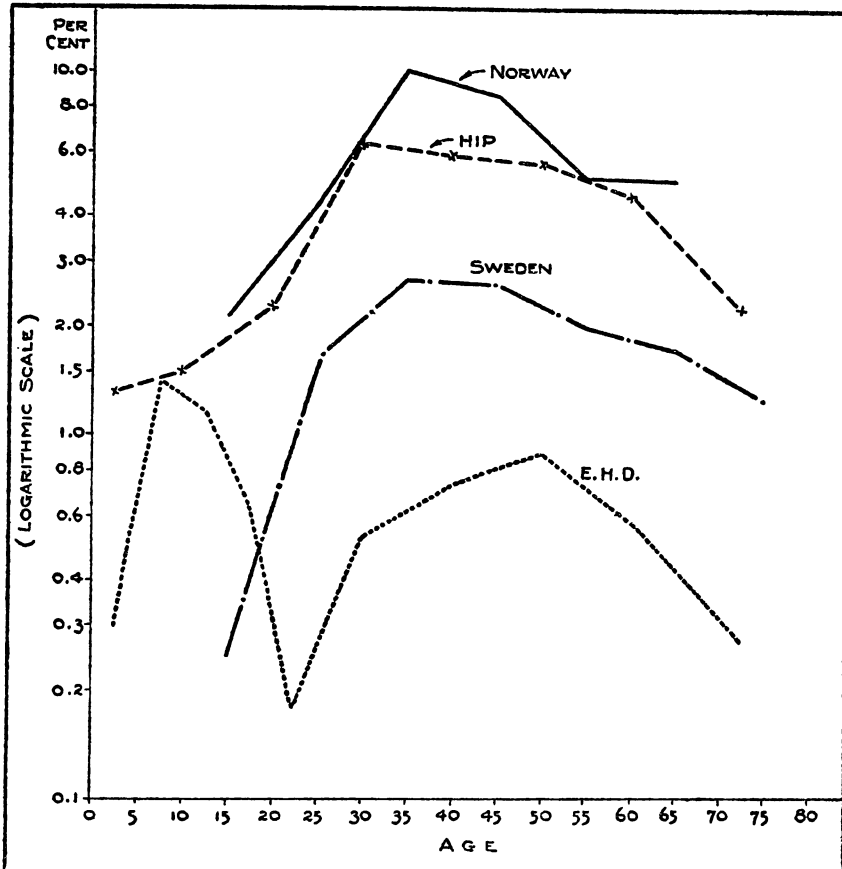
An age-interval during which the prevalence of neuroses is rising must be one during which the number of new cases exceeds the number of cases terminating. Contrariwise, the later period of falling prevalence is one in which terminations exceed onsets. The period of rising prevalence lasts two to three dec-

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ades. It is remarkable that so much variation in age of onset occurs in view of the fact that most currently held etiological theories relate to the period of early childhood. The long period of rising prevalence suggests that the onset of neuroses is an active phenomenon over many years of the life span. One would like to know the differences between neuroses beginning in the

Fig. 1. Evidence relating to age-specific prevalence.



NORWAY: Summation of psychoneurotic diagnoses arrived at by Bremer in his study of the whole population of a Norwegian fishing village where he served as the only physician during World War II (6).

SWEDEN: Neuroses diagnoses by personal interview of one of four psychiatrists surveying several rural parishes in Sweden (7).

E.H.D.: Neurotic traits from service agency records in the Eastern Health District, Baltimore (8).

HIP: Average annual prevalence, 1948-1951, of psychoneuroses for which enrollees in the Health Insurance Plan of Greater New York received one or more services in any one year from a group of physicians. Psychiatric diagnoses included: psychoneurosis, 88 per cent; psychoses, 2.1 per cent; behavior disorders and intellectual difficulties, 10.3 per cent (mostly under 15 years) (9).

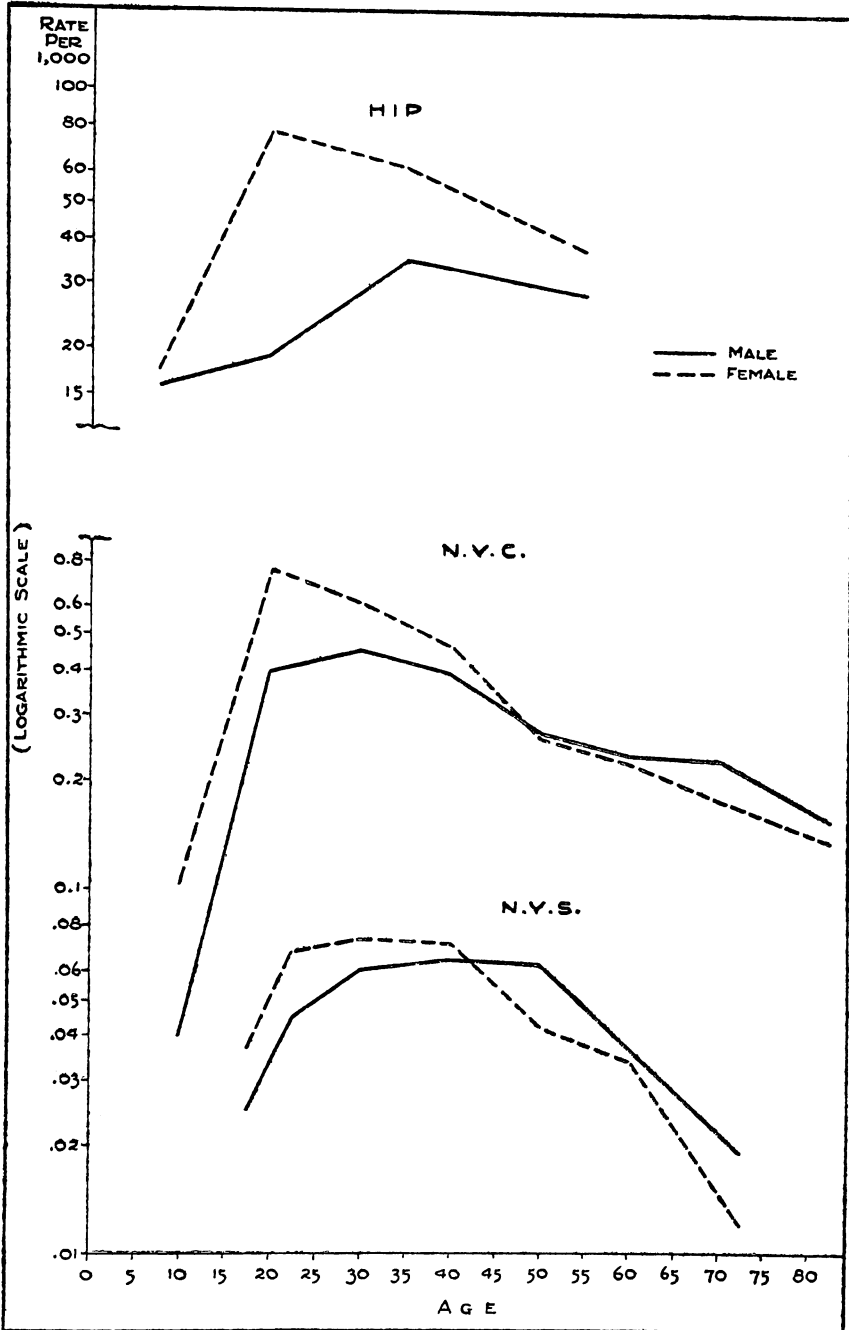
early twenties and those beginning in the middle thirties. Do they differ in clinical characteristics? Do they have different durations? (4, 5) Is there a difference in the circumstances surrounding the beginning of symptom formation?

The period of falling prevalence is one in which terminations of neuroses are more common than onsets. It may be that the neuroses commonly end during this period. They may come to an end because of recovery or because of the patient's death. If the clinical neuroses tend to be early phases of other illnesses, the neuroses may end by being transformed into a later phase, perhaps a somatization or a psychosis. In the second place, the terminations may be reflections of reduced severity: the neuroses may become less severe during this later portion of the life span and therefore be harder to recognize. In the third place, neurotic symptoms may, after a period of years, be less distressing to the individual as he becomes adapted to them and he may therefore complain less. Those who live with him may also become adapted to neurotic symptoms and find them less cause for complaint. This may account for the declining reported prevalence. In the fourth place, it may be that physicians are less responsive to neurotic complaints when they occur in older persons, or are more inclined to attribute them to some minor physical ailment and so not identify them as neurotic. Any, or a combination of all these four manners of terminating reported neurotic illnesses may be responsible for the decline in prevalence rates shown in Figure 1.

EVIDENCE ON THE INCIDENCE OF NEUROSES AT DIFFERENT AGES

With one exception, evidence relating to the incidence of neuroses and data relating to the prevalence of neuroses are available from different kinds of sources. In Figure 2 the age-specific incidence curves for neuroses are plotted as derived from a variety of clinical service agencies. There is reason to believe that these rates reflect a smaller proportion of neuroses than do the prevalence curves shown in Figure 1, and there is

Fig. 2. Evidence relating to age-specific incidence.



HIP: 'New Cases,' Enrollees receiving a service for psychoneurosis for the first time in 1951, having been enrollees for three previous years without receiving a service for psychoneurosis (9).

N.Y.C.: Annual rate of white persons discharged from New York City municipal hospitals with diagnosis of psychoneurosis. (Predominantly Bellevue and Kings County Psychiatric Divisions) (10).

N.Y.S.: Annual rate of first admission to State hospitals, New York State, with diagnosis of psychoneurosis (11).

no way of knowing how representative of the neuroses occurring in the populations served those who came to clinical attention might be. Furthermore, there is no reason to believe that most of the neuroses coming to clinical attention were of recent origin. In spite of these limitations the shape of the age-specific incidence curve is worth examining for clues regarding the relationship between age patterns for the incidence and prevalence of neuroses.

From Figure 2 it may be seen that these data suggest a peaking of onsets in the years of early maturity. These peaks tend to occur during the years of most rapid rise in prevalence as shown in Figure 1.

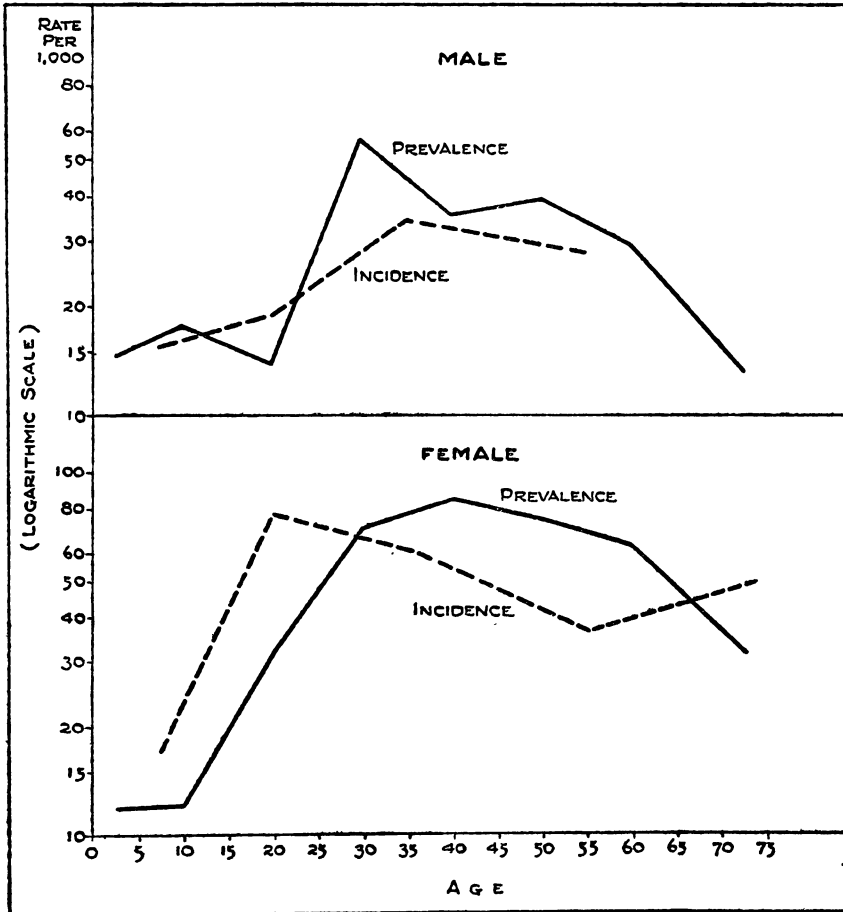
RELATION OF INCIDENCE TO PREVALENCE

The only source of information relating to both incidence and prevalence comes from the Health Insurance Plan of Greater New York. From these data age-specific curves are plotted in Figure 3 for cases reported as receiving a service in any one year and for cases receiving a service for psychoneurotic illness *for the first time* from HIP in 1951, having been HIP enrollees for at least three previous years without having a service for a psychoneurotic illness. While it is recognized that these are not direct estimates of momentary prevalence nor direct measures of the date of onset, they are superior to most of the other data available in that they are from a large population and that both measures derive from the same data. Because the reports stem from many different physicians trained in many different schools and practicing in diverse groups it is not possible to know just what criteria were being used to make and record these diagnoses. They undoubtedly varied widely. However, whether from accident or from consistency, both the 'prevalence' curve and the 'incidence' curve are similar to those obtained from other sources of data.

It will be noticed in Figure 3 that the incidence and prevalence curves not only have the same shape but are very close to one another, running almost parallel. From this it may be concluded that the variations in prevalence are due, predominantly,

to variations in incidence, since apparently the average duration of the neuroses reported in this population does not vary greatly with age. (The prevalence of an illness in a population is equal to the product of its incidence and duration.) Since the prevalence curve here is only slightly higher than the inci-

Fig. 3. For enrollees in HIP, average annual prevalence in 1948-1951 and incidence of "new cases" in 1951 of psychoneuroses for which services were given (9).



(See footnotes to Figs. 1 and 2.)
 The prevalence curves reflect the average annual experience over the years 1948-1951 of all H.I.P. enrollees with 12 months of coverage in any one of those calendar years. There was a total of 60,302 person-years of exposure over this period; 2,714 of these person-years were characterized by the existence of one or more services related to mental illness.
 The new case curves show the experience in 1951 of 6,643 enrollees who had entered H.I.P. by January 15, 1948, were still in the Plan on December 31, 1951, and had not received service related to psychoneurosis in 1948, 1949, or 1950.

dence curve, it follows that the average duration of these illnesses is between one and two years.

If the neuroses recorded in Figure 1 also have the same average duration at all ages, it would follow that their incidence rates would vary with age very much as do the prevalence rates.

DISCUSSION

While it is well known that neurotic illnesses can occur at any age and exhibit extremely long courses as well as very brief courses, the available data are remarkably consistent in suggesting that neurotic illnesses are most characteristic of early adult life, that there is a rising incidence and prevalence during the twenties and thirties, a parallel rising prevalence continuing into the forties, and then a rapid decline in prevalence of recognized neuroses. From these data it is perfectly clear that, in the mass, neuroses must have a limited course even if untreated; in fact, the best available data would suggest an average duration between one and two years. This does not seem to be in consonance with the commonly held views on the duration of neuroses, which are generally thought of as tedious and self-perpetuating illnesses. Whether the discrepancy between this view and the apparently relatively short average duration is due to an artefact in the reported data or to the fact that neuroses of short duration do not impress clinicians as much as the nagging cases, leading to a misapprehension as to their common course, cannot be determined without better data. If in fact, as these data suggest, there must be a large number of short-duration neuroses, it would be extremely important to know more than we now do about the factors which determine the duration of a neurotic illness. (3, 4).

For future studies to contribute to our understanding of the natural history of neuroses it is necessary that they distinguish levels of severity as well as clinical types. Data unrelated to levels of severity are of extremely limited use. Levels of severity of neurotic illnesses may be expected to vary with respect to (a) the patient's conscious sense of distress, (b) the awareness of the persons with whom he lives and of his attending

physician that something is wrong, (c) the extent of disability and the type of disability produced by the neurotic illness, and (d) the ease with which symptoms can be identified as neurotic symptoms. It is also important that the reporting of cases of neuroses should not be dependent upon the previous duration of the case nor upon assumed prognosis. Only data meeting these criteria can be expected to help us understand these pervasive and distressing illnesses.

An association of a disorder, or group of disorders, with particular phases of the life span as marked as that suggested in the data presented in this paper, suggests that attention to the special characteristics of this age group might yield information regarding the etiology of the disorders. Obviously, the years of early adult life have their own particular psychological, social, and physical characteristics and it is to be presumed that at least some of them are of etiological importance in determining the special predilection of this age group for neuroses.

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