SCHIZOPHRENIA—A HUNDRED YEARS AGO AND TODAY

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HAVE there been changes in the clinical picture of schizophrenic illness over the past hundred years? Or, to put the question more precisely, are the schizophrenic patients of the 1950s any different phenomenologically from their counterparts in the 1850s?

Recent studies (4, 5, 9, 14, 20) have aimed at determining the presence or absence of an increased incidence of psychosis in the nineteenth and twentieth centuries. Opinion is evenly divided as to whether the social changes of the twentieth century have significantly altered the epidemiology of psychotic illness. In spite of an increasing preoccupation with social psychiatry (13), the psychiatric literature is silent on the vital question "Have the changes of the past hundred years altered the clinical picture of schizophrenic illness itself?"

The present study, comparing a selected group of schizophrenics of both sexes from the 1850s and 1950s, begins the search for information on the change or lack of change in this important condition over the past hundred years.

MATERIAL

The material for this study is derived from the records of the Bethlem Royal Hospital. Detailed records are intact for all admissions from 1816 to the present time.

The records of 1853–1862 were selected for comparison with the 1950–1960 records of the present hospital. Originally we planned to use the 1850–1860 Bethlem records. In 1853, however, there was a change in the clinical staff of the hospital leading to the appointment of the conscientious reformer, Sir William Charles Hood, as resident physician (17). The records compiled during his tenure (1853–1862) are superior in quality and detail to those of his predecessors, and were found more valuable for our study. Since 1948 Bethlem Royal Hospital has been associated with the Institute of Psychiatry, and records have been compiled in the psychobiological tradition for teaching purposes.

METHOD

The initial presenting problem for the study was the proper selection of comparable material from past and present. The concept of schizophrenia, unknown to our predecessors, was not introduced into psychiatric nosology until the publication of Bleuler's famous monograph (2) in 1911. To determine the diagnostic criteria in vogue in the mid-nineteenth century we reviewed the psychiatric textbooks (3, 7, 10, 11, 15) used by the psychiatrists of the period. The generally accepted division of insanity at the time, and the one used at

Bethlem, was into Mania and Melancholia. Mania included the types of insanity with "confusion of ideas" (10, 15) and encompassed all syndromes where thought disorder was evident together with "violent passions" (10). Melancholia was diagnosed according to the presence of "depressing passions" with or without the concomitant presence of confusion of ideas.

It should be noted that admissions to Bethlem Hospital were usually acute cases, since according to the rules in force in the 1850s, no patient ill for more than twelve months was admissible. The following selection criteria were used for obtaining a comparable group of schizophrenic patients from the 1853–1862 records.

1. All patients over forty were excluded. Taking into account the current generally accepted age distribution of the various psychiatric syndromes, this selection factor tends to decrease contamination from Manic-Depressives, Involutionals, undetected chronic alcoholics, and undetected General Paretics.

2. All patients diagnosed as Melancholia, and all those diagnosed as puerperal psychosis were excluded.

3. All patients with sensorial or memory impairment were excluded.

4. From the remaining patients a group of 100 male and 100 female "schizophrenics" were selected. These patients all had:

(*a*) Evidence of thought disorder—i.e. a notation that the patient's language was disconnected and incoherent (loosening of associations).

(*b*) Evidence of secondary symptoms—i.e. delusions or hallucinations.

One hundred male and one hundred female schizophrenics were also selected from the 1950–1960 records. In order to make this group comparable, no patients over forty were selected. All patients in this otherwise randomly selected group also possessed evidence of thought disorder and delusions or hallucinations.

The following data were recorded:

1. *Age.*

2. *Marital status.*

3. *Religion.*

4. *Exciting and/or predisposing cause.* Statements concerning causation are included in the nineteenth century records and are of unusual historical interest.

5. *Heredity.* The presence or absence of mental illness in the patient's family was always recorded in both nineteenth and twentieth century records.

6. *Religious pre-occupations*—recorded as present if religion was the predominant concern of the patient's verbalizations during the illness.

7. *Sexual pre-occupations*—recorded as present if sexuality was the predominant concern of the patient's verbalizations during the illness.

8. *Length of stay in the hospital* (*weeks*). It was a Bethlem rule that patients who failed to recover within a year had to be discharged from the curable wards of the hospital; these patients were often accommodated elsewhere until they could be admitted to the incurable wards.

9. Was the patient acutely disturbed? Estimation of psychomotor agitation made by the resident physicians.

10. Recording of treatment used in the 1850s, where given (but in less than half the cases is there any mention of treatment).

Results and Discussion

Table I compares the data obtained from the mid-nineteenth and twentieth century schizophrenics. Table II summarizes data on the postulated exciting causes of the schizophrenic illnesses of the nineteenth century patients.

Table I

	Male 1853–1862	Male 1950–1960	Female 1853–1862	Female 1950–1960
Religious pre-occupations	60%	21%	48%	18%
Sexual pre-occupations	22%	38%	19%	45%
Both religious and sexual pre-occupations	11%	4%	11%	3%
Acutely disturbed	57%	9%	63%	7%
History of mental illness in the family	31%	24%	32%	33%
Marital status:				
Married	23%	19%	32%	38%
Single	77%	81%	68%	62%
Average age (years)	27·2	28·1	27·6	28·6
Length of stay (weeks)	37	17·9–18	35·7	21·5
Religion:				
Protestant	98%	83%	96%	84%
Roman Catholic	2%	13%	4%	10%
Jewish	1%	4%	—	6%
None	1%	—	—	—
Discharged:				
Cured	57%	—	57%	—
Uncured	39%	—	40%	—
Died	4%	—	3%	—

1. *Average age.* It is of interest to note that the average age of randomly selected male and female acute schizophrenics is essentially the same in the nineteenth and twentieth century groups. Thus, in the past one hundred years, there appears to have been little change in the decade of life when this illness is most likely to occur.

2. *Marital Status.* There appears to have been little alteration in the recorded marital status of male and female acute schizophrenics in the nineteenth and twentieth century groups.

3. *Religion.* The groups are comparable with respect to religion, with the exception that the twentieth century group contains a greater percentage of Catholics and Jews. This difference can be due to the relatively smaller number of Catholics and Jews in the population at that time. Wickham (19) states that only the Roman Catholic Church has shown a relative and absolute increase in membership since the mid-nineteenth century. The Jewish migration to London occurred after the mid-nineteenth century (8), accounting for the greatly increased Jewish population and the greater likelihood of having Jewish patients in the twentieth century population of the hospital.

4. *History of mental illness in the family.* The familial incidence of mental illness in the two groups is remarkably similar, except for a slightly lesser percentage in the male schizophrenics of 1950–1960. This data includes a history

of any form of mental illness in the patient's family, and has no reference to any particular psychiatric syndrome.

5. *Acutely disturbed.* Six times as many males, and nine times as many female schizophrenics were acutely disturbed in the nineteenth century compared with the twentieth century group. The data on the twentieth century group records admission behaviour, usually unmodified by tranquillization.

It is difficult to determine the significance of this finding. O'Donoghue (17) describes the changes that occurred in the patient clientele of Bethlem in the 1850s. One of the reforms (1856–1859) instituted by Sir William Charles Hood was to raise by degrees the social status of the patients eligible for admission. In 1859 the Board of Governors defeated an effort made by the Common Council to reserve the hospital for the pauper insane. During the tenure of Dr. Hood the physical format of the hospital was humanized, with the installation of sofas, carpets, pictures, etc. Iron guards were removed from the windows. From our modern concepts, these improvements should have exerted a soothing influence on psychomotor agitation.

Some patients were admitted to Bethlem after a short period of confinement at other private hospitals. Whether these other hospitals transferred mainly unmanageable patients it is impossible to say.

However, the tremendous discrepancies noted in comparing the nineteenth and twentieth century figures strongly suggest that psychomotor agitation was more prevalent in the nineteenth century male and female schizophrenics. The individual nineteenth century records present startling descriptions of violent behaviour seen with great rarity in our contemporary experience. One of us (J.G.H.) has been impressed with the decrease in psychomotor agitation in the schizophrenic population during his twenty-five years at Bethlem.

6. *Length of stay.* Before discussing the data on length of stay we must mention a cut-off factor used in tabulating the 1853–1862 results. Although length of stay at Bethlem during the mid-nineteenth century was officially limited to one year, some patients, for special reasons, remained for one-and-a-half to two years. In order to avoid distortion of the results by these few patients. all such patients were tabulated as having been hospitalized for sixty weeks. The same factor was used for the 1950–1960 group.

A comparison of the results shows that the nineteenth century patients remained in the hospital approximately twice as long as the twentieth century patients. It was a hospital practice in the nineteenth century to grant patients a month's leave of absence prior to discharge. If the patient functioned well during the month away from hospital, he was seen again by the Committee and discharged. Our figures are based on the period of hospitalization prior to the granting of the leave of absence.

Why were patients hospitalized longer in the mid-nineteenth century than today? Only speculations can be given in answer to this question. First, it appears from the data on psychomotor agitation that the mid-nineteenth century patients were more acutely disturbed than the twentieth century schizophrenics. These patients may have been more seriously ill, and hence stayed longer in hospital. Secondly, little treatment was available in the 1850s. Sedation was attempted by using tincture of morphine and was never very effective. Although the patients were closely observed by medical personnel while in hospital, there was an absence of any after-care facilities, possibly necessitating longer hospitalizations. In the 1950s, with an excellent follow-up clinic and a Day Hospital available, patients could be discharged and yet remain under close supervision.

7. *Discharged, cured or uncured.* Each record in the 1853–1862 group contains a statement that the patient was cured or uncured on discharge. The cured percentages of male and female schizophrenic groups during this period were exactly the same. The uncured and death percentages were also nearly equal.

In the 1850s, one of the main duties of the mental hospital was to protect the public from destructive acts perpetrated by those with mental disturbance. Therefore, although criteria of cure are not stated, it appeared to us that freedom from the desire to injure the self or others was the main standard used by the discharging committee. The statistics seem to indicate the improvement and abatement of acute disturbance, rather than disappearance of primary and secondary symptoms in the modern sense.

8. *Religious preoccupations.* The most striking data obtained from the study concerns the tremendous preponderance of religious preoccupations in the mid-nineteenth century schizophrenics. Three times as many male and female acute schizophrenics had religious preoccupations in the nineteenth century as compared with the twentieth century group.

We feel that this finding has great import for contemporary phenomenological research in schizophrenia. Bleuler embraced the early work of Freud and Jung, and encouraged attempts to comprehend the causation and clinical picture of schizophrenic illness through a careful analysis of the symptoms. Buttressed by the support of so eminent a clinician as Bleuler, contemporary psychoanalysts have delved deeply into the meaning of schizophrenic symptomatology, thinking that such detailed investigation would aid in unravelling the cause and nature of the illness. Since the observations of Freud, psychoanalysts have emphasized the importance of sexual disturbance in the aetiology of mental illness, including schizophrenia. If these psychoanalysts had been considering patient material of the mid-nineteenth century, they would have been forced to consider religious disturbance as a prime factor in the aetiology of schizophrenia.

Indeed, some psychiatrists of the period did consider religious excitation (3, 7, 15) a cause of insanity. However, an examination of the position of religion in mid-nineteenth century England shows that the religious preoccupations vented by schizophrenic patients were largely culturally determined.

Wood (21) contrasts the position of religion in England in 1850 with that of 1950. He states "a hundred years ago, organized Christianity, including in the term both the Established Church and the Free Churches, played a greater part in the life and thought of Britain than it does today. Today not more than 10 per cent. of the nation joins in public worship" (Rowntree's data from York). Addison (1) and Wickham (19) provide us with objective religious data in 1851 England. Although questions regarding religious affiliation were not permitted during the official census, Horace Mann, a barrister, was asked by the Registrar General to organize a voluntary count of all people worshipping on a certain Sunday throughout England and Wales. The day chosen was 30 March, 1851. Out of a total census population (England and Wales) of 17,927,609 and church sittings of 10,212,563, the actual attendance at all churches was 7,261,032, or over 40 per cent. of the total population.

Wood (21) says "A hundred years ago, the Puritan tradition, with its sharp division between the Christian way of life and the life of the world, with its distrust of what we should now regard as innocent pleasures, with its emphasis on self-discipline and self-control, powerfully influenced all classes and churches. Allied to the Puritan interpretation of what it means to keep oneself unspotted

from the world was the idea of the world as a vale of tears, and of the Christian as a pilgrim journeying to a better land".

How religion permeated life in the early Victorian age is described by Kellett (12), "In the family the father ruled by divine right; the mother, however dexterously she might continue to be the real power behind the throne, openly supported his authority, and the children were kept in subjection." . . . "It was constantly emphasized that the will of the parent was the Will of God. and that disturbance of the parental convenience was a sin of the first magnitude. The more religious a father was, the more likely was he to make this confusion between his own inclinations and the divine purpose."

Education during this period (until 1870) was under religious control (1, 18). Schools were maintained by the Established Church and by the Non-conformists. Moorman (16) tells us "At most of these schools (public and grammar) there was a strong Church atmosphere. The headmaster was often in Holy Orders, as were several members of the staff. The Chapel played an important part in the life of the school. Confirmation was administered almost as a matter of course, and many of the boys were taught to read the New Testament in Greek." Kellett (12) tells us how children were frightened by pictures of Judgement Day, and by gruesome descriptions of the torments of Hell. Even books for pre-school children had chapters on Hell. God was portrayed as a tyrant whose eyes were in every place, watching for delinquency.

Small wonder then, that the schizophrenics of the period were preoccupied with religion, when nearly every other member of the society was. It does not seem strange that a mid-nineteenth century adult, having been trained to flee the fires of Hell since childhood, should hear God's voice and fear His retribution after developing a schizophrenic illness. Or, to draw an analogy, that may or may not be far-fetched, the mid-twentieth century adult, exposed to our society's preoccupation with sex, may be expected to develop sexual pre-occupations during a schizophrenic illness. We wish to point out that such pre-occupations may be culturally determined. Looking for the aetiology of schizophrenic illness in a detailed analysis of religious and/or sexual delusions or hallucinations appears to be a futile search.

9. *Sexual preoccupations.* Approximately twice as many male and female acute schizophrenics had sexual preoccupations in the twentieth century group as compared with the nineteenth century group.

What this comparison means is difficult to determine. We have no even faintly reliable data concerning sexual behaviour and attitudes of mid-nineteenth century England except the oft-mentioned general impression that it was a period of sexual suppression. If this is a valid assumption, we would expect outpourings of sexual material during acute schizophrenic illness, according to Freudian theory. Actually, twice as many twentieth century schizophrenics had sexual preoccupations as did nineteenth century schizophrenics. If sexual factors are of vital importance in schizophrenic illness, they should have been just as important and prominent in the 1850s as they are in the 1950s.

One objection will doubtlessly be raised against our data: it will be claimed that the psychiatric examiners of the period were products of their age of suppression and did not record sexual data where it was prominent. Our perusal of the mid-nineteenth century records revealed that this was not the case. Florid sexual material vented by both male and female patients was faithfully recorded. With female patients, sexual factors connected with menstruation and pregnancy were carefully observed. Delusions of infidelity and delusions

regarding homosexuality were recorded where present. The only sexual sphere where wild speculation was found occurred in reference to male masturbation, which was still believed to be a cause of insanity. Statements like "The patient looks as though he masturbates, but he has not yet been observed doing it" and "His insanity is obviously due to masturbation" were frequently found in the nineteenth century records.

10. *Both sexual and religious preoccupations.* Both sexual and religious preoccupations were found present in approximately three times as many male and female patients in the nineteenth century as in the twentieth century group. Interestingly enough, we have observed that three times as many male and female schizophrenics had religious preoccupations in the nineteenth century as compared with the twentieth century group. The greater number of nineteenth century patients having both sexual and religious preoccupations is most likely due to the greater number of patients having religious preoccupations during that period.

11. *Miscellaneous.* Postulated Causation and Treatment of Schizophrenic Illness during the mid-nineteenth century. In the mid-nineteenth century records speculation regarding causation was recorded under two headings, "exciting cause" and "predisposing cause". The data presented in Table II is a compendium of the "exciting causes". "Predisposing causes" were usually

TABLE II

"Exciting Causes"

Exciting Cause 1854–63	Male Per cent.	Female Per cent.
1. Sexual factors (love, masturbation, etc.)	7	20
2. Masturbation	11	1
3. Employment and business difficulties	12	6
4. Religious excitement	11	8
5. Overwork	13	5
6. Anxiety	7	7
7. Death of a loved one	5	9
8. Politics	2	0
9. Not known	27	34
10. Others	5	10

"hereditary" or "previous attack". Most of the speculations about causation represent an attempt to establish a temporal relationship between events in the patient's life and the onset of the illness.

The *treatment* prescribed for these mid-nineteenth century schizophrenics is also of unusual historical interest. As previously stated, in less than half the cases was there any record of the treatment prescribed. The following is a list of the medicaments mentioned, alas, all too briefly:

Liq. Morph.	Ol. Tighi	Antim. Pot. Tart.
Mist. Camph.	Mag. Sulph.	Castor Oil.
Decoc. Alves	Spt. Ammon.	Cinchona.

O'Donoghue (p. 363) reported that two padded rooms were installed in Bethlem in 1844 for the safety of disturbed patients.

No references to the use of cupping at this time were found and in only two of the two hundred cases was bleeding recorded as being used for treatment.

Narcotics were largely prescribed, but Haslam (10) had earlier stated that opium given to patients with violent paroxysms hardly ever produced sleep and might render the patient more furious. Burrows (3) later believed that

opium given in the early stages of the illness induced sleep by "increasing sanguinous congestion and compressing the brain".

Purging and Vomiting. Haslam (10) had stated that diarrhoea often produces a natural cure of insanity. Burrows (3) condemned purging but also said that "keeping the bowels in free action is indispensable in all cases of insanity, but absolute purging in the incipient and active stages is especially necessary". He agreed that there is no remedy for the cure of insanity that is more generally or strongly recommended than vomiting.

Camphor. Haslam (10) says of camphor that "this remedy has been highly extolled, and doubtless with reason".

Burrows (3) says of it that "the anti-maniacal virtues of this substance have been highly extolled and some marvellous cures ascribed to it" but he added "modern physicians have little confidence in it".

The *London Medical Journal* (Vol. VI, p. 120, about 1820) reports a case where a "perfect cure" followed a camphor-induced fit in a case of mania. This is of particular interest in view of the use, more than a century later, of convulsion treatment in the psychoses, and of camphor as the convulsant drug. But the final conclusion in the *Journal* was that "in rash hands it may prove dangerous to life and in the most dexterous can rarely be used to advantage".

Tube Feeding. Burrows (1928) after referring to the number of patients with delusions of being poisoned who were refusing food, says, "I have seen liquid nutriment introduced into the stomach most readily by means of a stomach pump; passing its hollow elastic tube through a nostril is more readily made than forcibly separating the jaws."

G. W. Daniels, in his article on Forced Alimentation, in *The Journal of Mental Science*, 1856, Vol. 2, p. 121, says that after many years of practical experience, he doubted the propriety of its use in all cases where the patient is refusing food, "though it is sometimes successful". He described the death of three patients in spite of this method of treatment.

Koch in *The Journal of Mental Science*, 1871, Vol. 16, p. 624, describes a "new feeding apparatus for the insane".

Summary

In order to answer the question "Have there been changes in the clinical picture of schizophrenic illness over the past hundred years?" a selected group of schizophrenics of both sexes from the 1850s and 1950s is compared. Methods of proper selection of comparable material from past and present are described. Data are presented in two tables.

Comparing the two groups revealed:

1. The average age was essentially the same in the nineteenth and twentieth century groups.
2. The proportions of married and single patients was almost the same in both groups.
3. Both groups were comparable with respect to religion. Differences were related to factors unconnected with schizophrenic illness.
4. Remarkably similar familial incidence of mental illness in the nineteenth and twentieth century groups was found.
5. Six times as many male and nine times as many female schizophrenics were acutely disturbed in the nineteenth, as compared with the twentieth century group. This discrepancy was discussed. It was thought probable that psychomotor agitation was more prevalent in the nineteenth century schizophrenics.

6. Length of hospitalization was twice as great in the nineteenth as in the twentieth century schizophrenic group. Reasons for this were discussed.
7. The cured percentages of the nineteenth century male and female schizophrenic groups were exactly the same. What "cured" meant in the mid-nineteenth century was discussed.
   Three times as many patients of both sexes had religious preoccupations in the nineteenth century as compared with the twentieth century group. This was the most striking finding of the study, and its importance for contemporary phenomenological research in schizophrenia was emphasized.
8. Summarizing the position of religion in mid-nineteenth century England, it was shown that religious preoccupations were largely culturally determined. It was suggested that the contemporary sexual preoccupation of schizophrenics might also be culturally determined. Delving deeply into the meaning of symptoms that might be culturally determined was not thought helpful in searching for the cause of schizophrenic illness.
9. Approximately twice as many patients of both sexes had sexual preoccupations in the twentieth century group as compared with the nineteenth century group. Reasons for this difference were discussed.
10. Approximately three times as many patients of both sexes had both sexual and religious preoccupations in the nineteenth century as in the twentieth century group.
11. Data was presented on the postulated causation and on the treatment of schizophrenic illness during the mid-nineteenth century.

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