Emil Kraepelin (1856–1926)

Emil Kraepelin was born in a small village near the Baltic Sea, studied medicine in Würzburg and then, after short periods as a research assistant to the psychologist Wundt and to the neuropathologist and neuroanatomist Flechsig, he was appointed professor of Clinical Psychiatry in Munich, where he remained until his retirement.

He is widely regarded as a father of modern psychiatry, and is best known for his identification and careful description of dementia praecox. Although its name was later changed to schizophrenia, and although some subsequent psychiatrists have criticised Kraepelin for being too neurological in orientation, such criticisms are unfair and fail to appreciate the resilience of the concept which he developed. He was an organic psychiatrist by today's standards, but was far more sophisticated in his treatment of disease categories than many of his contemporaries who multiplied these categories too readily. He was also an acute observer of mental phenomena, and his notions about the essential psychological nature of dementia praecox have been overlooked by subsequent writers. The following extract is his first description of dementia praecox in the fifth edition of his textbook published in 1896. It has never been translated before.

Dementia praecox

E. Kraepelin (1896)
(Pages 426–41 of the 5th edition of *Psychiatrie*. Barth: Leipzig)

Dementia praecox is the name I have given to the development of a simple, fairly high-grade state of mental impairment accompanied by an acute or subacute mental disturbance.

The course of the illness may vary. We shall first consider those cases which are characterised by a restricted presentation of all the possible symptoms; many never come to the attention of the psychiatrist, nor are they attributed to morbid processes. The whole disturbance can be very gradual and the symptoms so ill-defined that relatives see them only as the result of an unfortunate development or perhaps a weakness in character. As a rule it gradually becomes apparent that the mental faculties of the patient are declining. He may still show the same or even greater industriousness, apply himself tirelessly to his books, engage in massive, inappropriate and indigestible reading or

occasionally, occupy himself with remote and difficult problems. In fact, however, he is no longer able to grasp anything correctly, to follow complicated arguments, or to concentrate his attention. He is distracted, his thoughts wander aimlessly, he dreams and broods without any real interest or recognisable aim and reads the same passage over and over again from start to finish without understanding it. He will make mistakes even in simple copying, by introducing variations, leaving some things out, and making arbitrary and inappropriate insertions. In the early stages we may find hypochondriacal complaints, self-reproach, fears for the future, and even transient ideas of persecution or of grandeur. Such disturbances, however, are usually vague and indefinite and do not develop further. Rarely, there may be hallucinations of sensations or voices. One such patient kept hearing sentences like the following:

> For we ourselves can always hope that we should let ourselves pay for other thoughts. For we want it ourselves, want to know it, who with us should let the swine torture to death. No, we ourselves are no longer so stupid and do not always bother if we should spare ourselves from drinking. For we play the fool and should let ourselves be tricked silly.

While saying this he seemed quite rational, laughed at such nonsense, thought he was ill and even went on working. From other accounts, however, he had clearly become less mentally competent, though hitherto he had been of higher than average intellectual ability.

In the early stages of this morbid disturbance memory remains basically intact. The patient retains throughout a store of knowledge, which in some cases is very extensive, and an excellent command of language. Some patients may still achieve a certain standard of rote learning, while others may take days to master a few words or proverbs. They are always, however, completely incapable of comprehending and developing new ideas. Individual components of experience are no longer connected; there is no interaction between them; they lead to no concepts, judgements or conclusions. In spite of the good memory retention, therefore, there is still an inevitable and progressive mental deterioration, the most striking features of which are the patient's inexplicable lack of judgement and the incoherence of all his thinking.

Consciousness remains unclouded; the patient is never disoriented in space or in his relationships, and not infrequently he is aware, with

varying degrees of clarity, that his mental faculties are declining. He makes no further progress in his profession, passes no examinations, carries out no complicated mental tasks, and sets about things the wrong way round and in an aimless fashion. His intellectual horizon narrows; easy relationships with the outside world shrivel away. As a rule he gradually loses all interest in mental activities or mental stimulation, his thoughts move only in well-worn stereotyped grooves, and in the end he may be limited to mechanical activity – sawing wood, copying, gardening – often in sharp contrast to earlier ambitions, plans and hopes.

In the early stages mood is usually labile. We frequently encounter dejection, ill-humour or excitable disputatious behaviour; or there may be a sudden and groundless change from boisterousness with heightened self-esteem to an anxious sense of failure. At a later stage these mood swings are replaced by a degree of dullness which is only occasionally relieved by sudden, isolated outbursts. It is surprising how well the patient accepts his disabilities and failures. Although he admits that he has done many things in a topsy-turvy fashion, and has been 'very foolish', he is still quite pleased with his situation and is not worried about the future. He does not reflect upon his condition but lives from day to day, sometimes apathetically, at other times with a vague and sanguine expectation of some future good fortune.

In their actions patients show either great idleness and slackness or bear a childish, foolish stamp. Their will is unstable, with no independent force; at one moment they are stupidly obstinate, at the next suddenly docile and manageable. They neglect their personal appearance, live erratically, misplace objects of importance, forget their obligations and commit all kinds of silly, foolish acts. One patient, who had succeeded with difficulty in becoming a school teacher, suddenly became completely incapable of doing his job, could not run his class, played tig with the children instead of teaching them, lay down in a manger in the cowshed 'just for fun' and stuck his head into the fountain because he needed to be re-baptised because of his great sins. A striking feature in such behaviour is frequent affectless laughter, which is repeated during every interview and for which there is not the slightest reason. It is not based on levity of mood; on the contrary, patients sometimes report that it comes over them irresistibly, against their will. Occasionally they also exhibit grimacing, grunting, stereotyped postures and movements, or elaborate and affected gestures.

Their speech contains theatrical declamations, repetition of certain mannerisms, stale jokes, high-sounding phrases, deliberate distortion of words, affecting lisping, and the use of unusual expressions, phrases or sentences, perhaps in dialect or foreign languages. Many of the same characteristics appear even more plainly in the patients' writings. Here we find careless and incoherent thinking, long drawn out sentences with many changes of construction, a mixture of different kinds of imagery, the sudden introduction of new ideas and rhymed effusions that are often like a sort of song. The writing is asymmetrical, individual letters are disfigured by flourishes and underlinings, and there are either too few or too many punctuation marks. In fact, the patients' letters are often so characteristic that on the basis of them alone it is possible to make an assured diagnosis of this special form of mental impairment.

The course of the illness varies, in that the dementia may proceed at a slow or fast rate, or be halted at different stages. In the most favourable cases the illness ends after a few months or years in a state of severe mental impairment. The condition then remains unaltered for the rest of the patient's life, though at times it would seem that some of the symptoms gradually disappear. The premorbid level of mental ability is never fully regained. There are probably many people who have suffered a mental breakdown due to dementia praecox, but who have never been diagnosed as such because they have managed to retain sufficient mental ability to survive the struggle for existence and to pursue modest activities. Many industrious and even gifted pupils may belong to this category; they start off with justifiably high hopes, but later, and in spite of effort and conscientious striving, disappoint their teachers and have the greatest difficulty in attaining what their far less-talented classmates achieve with ease. Of course, only precise knowledge and follow-up of individual cases can provide proof of morbid change. Because of their incapacity for regular work, such mentally crippled youngsters often join the ranks of beggars and vagrants, perhaps later to be admitted to the work-house or the asylum. In other cases we find that after a few years the degree of mental impairment is such that they can no longer live independent lives, though within the framework of an institution or in family care a certain measure of mental or practical activity can be maintained.

The patients who come to the attention of the psychiatrist are not as a rule those with the milder forms of illness described above. In the large majority of cases the clinical picture is much more stormy. The illness in these cases often begins gradually. The early signs are

headache, buzzing in the ears, confusion, giddiness, tiredness, and surly, irritable, withdrawn behaviour. The patient sleeps badly, loses his appetite, becomes run down physically and seems to be inert and apathetic, slovenly and forgetful, and either does not pursue his usual activities at all or performs them badly with many interruptions. His mood is now nearly always depressed, with self-reproach, groundless weeping, thoughts of death, and sometimes even sudden and unexpected suicidal attempts. He has given false testimony, indulged in self-abuse, fallen into evil ways, is damned beyond hope of redemption. No one can help him, everything has gone wrong for him and his life is worth nothing. He may busy himself night and day with religious texts and express a wish to enter a monastery.

At the same time he has all kinds of vague ideas of persecution. He becomes suspicious of those around him, sees poison in his food, is pursued by the police, feels his body is being influenced, or thinks that he is going to be shot or that the neighbours are jeering at him. He may, however, feel very definitely that he is ill: he feels he is not free, his head is not clear, he is no longer as he used to be; reason, understanding and sense have fled from his brain. At times such ideas assume a hypochondriacal form. Something has got into his head, his blood is not circulating, his stomach is not functioning, his insides are burned up and rotten. I have seen two such patients, whose hypochondriacal ideas fitted in with earlier ailments from which they thought they had not yet recovered.

Hallucinations are also common, especially auditory experiences of abuse, threats, demands, whispers, which in some circumstances seem to influence the patient's actions. It is not usually possible to learn more from the patient about these subjective experiences. As a rule he says little, is timid or preoccupied, and at times even confused and unintelligible. His mood at this stage is usually depressed or anxious. Often, however, there is a marked degree of apathy and indifference, which bears no relation to the content of his delusional ideas and hallucinations. The patient may often laugh unexpectedly and with no good reason; at times he may show angry or anxious irritability, with violent emotional outbursts.

The most striking feature, however, is the lack of inner consistency in his speech and behaviour. He gives meaningless, incoherent, disjointed answers, and talks at times foolishly in incomprehensible sentences. He suddenly goes bathing with his clothes on, kisses the ground, makes a childish attempt at suicide, attacks members of his family, undresses in the street, wanders off aimlessly for weeks at a

time, and when reproached offers the vaguest reasons for his behaviour. Often it is this kind of extraordinary and senseless behaviour that first makes his relatives aware of the developing mental disturbance. A postman, who had hitherto carried out his duties without interruption, one day signed an official document as Field Marshal General, demanded a helmet and the uniform of a general, said he was the son of Kaiser Wilhelm and that he knew from his supervisor's fingernails that he was his brother.

As the delusional ideas disappear and the affective symptoms fade this first stage of the illness may, within a few months or years, imperceptibly, and with no intermediate episodes, pass into simple dementia. In many cases, however, there are outbursts of florid, expansive excitement, sometimes accompanied by sudden mood swings and in women often coinciding with menstruation. The patients become merry, carefree and talkative; they relate all kinds of fabricated experiences, and express confused, not always very magnificent, ideas of grandeur: they have a lot of money, a room full of gold, beautiful clothes, they want to go and see the Emperor, join the Army, become a parson, an actress. They are at the same time poorly oriented towards their environment; although they recognise individual persons, they do not know precisely where they are or what is happening to them, and they are incapable of assessing their situation.

As a rule these phenomena are accompanied by a state of lively sexual excitement. They claim to have been married for fifty years; they have had twenty-two wives; they want a girl, demand sexual intercourse, masturbate. There is not usually much motor unrest. Loud, incessant talking and shouting are exceptional and occur only when nursing care is inadequate, as does beating on doors, unclean behaviour, tearing of clothes and undressing. Left to themselves, the patients are inclined to run away and go wandering; they soon come to grief, commit silly, senseless acts or sexual excesses and usually come very quickly into conflict with the law. In individual cases their state may closely resemble one of hysterical excitement. The similarity becomes even greater if, as sometimes happens, there are accompanying fainting fits, ocular gyrations, fits of laughing, dyspnoea and convulsive attacks.

The expansive excitement, which rarely manifests itself in the form of ideas of grandeur, the euphoric mood and the groundless laughter do not usually persist for long in pronounced form. After a few months or less, the symptoms fade and the condition appears to have

improved. But, although the patients become calmer, it is at this point that signs of severe mental impairment begin to emerge. Usually this develops into a simple, apathetic dementia, though occasionally a certain degree of cheerful, silly excitement will be maintained, even in states of advanced dementia, a feature more characteristic of women than of men.

In patients with transient but clear-cut delusions, the illness follows a different course. In the early stages, ideas of persecution predominate, associated with ideas of bodily influence. The patient finds poison in his food, 'hobnail juice and potash', feels contractions in his spinal cord, hears voices in his genitals, and thinks he is two people. He is being anaesthetised, bewitched, blinded with mirrors, denounced as a spy, will be sentenced to eternal damnation. He is being debauched, his semen has been removed. Female patients often complain of sexual assault. Other people read their thoughts, imitate their actions, suggest words to them. They hear voices which repeat everything they say, urge them to commit suicide. They see the devil sitting before them; they are fit only to be executed; they will never be healthy again.

At a later stage ideas of grandeur often gain the upper hand. The patient has come into a huge inheritance, he is descended from the Kaiser, he has lived in the world for thousands of years, he sees visions of the saints in heaven, he converses with God. At night he has intercourse with the Holy Spirit. Dream experiences are often turned into delusions, or into a fabricated adventure. The patient has been to Paradise, he comes from the land of Job, he was an army doctor hundreds of years ago in America, he thinks he is 'the Northern Lights', or 'Mount Horeb'. As a rule, such absurdities have a florid onset and then fade into the background: they become more meagre and finally disappear altogether, or persist only as a few isolated, incoherent, fragmentary ideas which crop up at rare intervals in response to explicit questions or in moments of excitement. At the same time the initial high spirits or irritable mood changes to apathy and indifference.

It would seem that in most cases the disease progresses into a state of profound dementia. The patients sink lower and lower, and become silly and apathetic, losing all understanding of their surroundings. Often their eating habits deteriorate, they gulp greedily and smear their food around them; they soil themselves, retain faeces and urine, dribble spittle over their clothes. Their voluntary movements may

cease; they stand or sit wherever they happen to find themselves, mute and idle; they make occasional silly comments; they have to be dressed and undressed, fed and moved about.

In response to external stimuli, they may be passive, cataleptic or resistant. Their sparse answers are usually quite irrelevant, showing only occasionally some understanding of the question; simple but firm requests are sometimes correctly obeyed, and a few individuals known to them from their past are correctly named. They succeed now and again in displaying remnants of knowledge from their schooldays – correct reading or writing, the right answer to a sum, or the retention of some historical, geographical or grammatical fact. In time, however, such traces of earlier mental functioning gradually disappear, until finally only an isolated, very firmly-rooted memory bears witness to the fact that what we have here is not uncultivated or barren ground but land that has been laid waste. Sometimes clear traces remain of the earlier excited state, with confused, incomprehensible sentences, foolish laughter, affected movements and expressions, and violent rushing up and down. Often the patients show transient phases of irritation: they will suddenly rush outside, use bad language, act violently, break a window pane, throw a key to the ground, tear one of their garments or strike an unexpected blow at a room-mate. They may pluck at their clothes, tie them in knots, drape themselves dramatically in their garments, pluck hair from their beard or head, scratch themselves persistently in certain parts of the body and openly masturbate.

In my experience the development of dementia praecox is usually accompanied by a series of bodily disturbances. Apart from the changes in sleep and appetite which also occur in states of excitement and affective disorders, some symptoms which point to an increase in nervous excitability deserve particular mention. The tendon reflexes are very often lively and in many cases there is an increase in muscular reactivity and skin responses. Menstruation is often irregular or ceases entirely. In two cases the illness was preceded by a pronounced attack of tetany. Finally, in a number of cases fainting fits occurred in the course of the illness. I recently saw a slightly older student. From adolescence he had been particularly gifted but suddenly fell into a deep coma from which he only very gradually awakened. Apart from slight pupillary change, facial symptoms and increased reflex activity, there was no evidence of cerebral damage. When I examined him a few weeks later, however, he presented a clear picture of premature mental impairment.

The course of dementia praecox is generally regular and progressive.

It is rare to see a substantial remission of the symptoms; at least the excitement disappears, but the mental impairment remains. On the other hand, it is fairly common to find patients who are calm, whose condition has 'improved', but who revert even after years to a state of excitement. Body weight usually decreases steadily in the early stages and when the patient is excited. As he begins to calm down and dementia sets in, the body weight rises again, often considerably, so that patients begin to look positively blooming as their appetite increases.

The most common outcome in severe forms of dementia praecox is dementia. In many cases the patients' outward bearing may remain fairly intact after the more stormy symptoms have subsided. They are fairly well oriented as to their surroundings and situation; they show some insight into the illness they have suffered; but at the same time they can keep going only if their lives follow the most simple pattern. They take no part in what goes on around them, and show no interest in the passage of time or in their means of subsistence, though with precise instructions they are often able to make themselves useful in small ways. Apart from the intellectual defect, the most common residual symptoms of the illness are irritability, sensitivity to alcohol, occasional states of excitement, odd modes of expression and peculiar behavioural habits.

We should also include here those isolated cases in which the delusions and hallucinations of the excited phase gradually fade into the background but are still liable to recur transiently from time to time. Occasionally we find persistent hallucinations which do not seem to affect the patient and which they rarely mention. Sometimes, however, particularly during menstruation, such patients may suddenly become excited, with vivid hallucinations, persecutory and grandiose ideas, and destructive urges. After a short time they calm down and regain insight into their condition. One cannot talk about persistent, firm delusions in such cases. It is more a question of weakness of judgement.

After the illness has run its course there is no real possibility of further educational pursuits; at best, one can expect to maintain the patient's condition in some degree of stability. It is relatively rare for the patient to be able to return to even a modest degree of mental independence.

Dementia praecox is a very common illness. During the last five years it has accounted for five to six per cent of admissions to my clinic. Very little is known at present of the causes of the disorder. We do

know, however, that it is particularly liable to develop in adolescence and early childhood. In more than half the cases I have collected, the onset was between the ages of 16 and 22. Further experience may, of course, reveal cases with a later onset, which today are given a different diagnosis. It is certain, however, that the large majority of cases of sudden onset and eventual dementia belong to the younger age groups. For this reason dementia praecox has in the past been called 'youthful insanity' or 'hebephrenia'. Men appear to be three times more likely than women to suffer from the forms of illness described here, a fact which seems strange when one considers the reverse ratio in catatonia. An inherited predisposition occurred in about 70 per cent of the cases which were closely scrutinised, and so-called signs of degeneracy were often observed: smallness or deformity of the skull, child-like habitus, missing teeth, deformed ears. The patient's original abilities had usually been good, often better than average; occasionally, however, some degree of mental debility had been evident from an early age. A number of my patients showed a diffuse enlargement of the thyroid. I cannot, however, attach any special significance to this finding, in view of the great frequency of the same phenomenon in this neighbourhood.

The first precise, and in many respects exemplary, description of certain forms of dementia praecox was given by Hecker in 1871. He was influenced by Kahlbaum's description of certain cases of mental disorder and observed that melancholia followed by mania often turned into a quite specific form of mental debility. Only a small proportion of the cases which I regard as dementia praecox would fall into the category of hebephrenia in this sense. Daraszkiewicz, in his dissertation of 1892, extended the concept of hebephrenia to cover the severe forms which end in profound dementia. I believe that provisionally we should retain the term dementia praecox for the extended group of illnesses.

As Hecker pointed out, the age of onset is usually adolescence or early adulthood. It is this which lends a distinctive stamp to the mental disability that constitutes the end stage of hebephrenia. Hecker was inclined to think that the outcome of his hebephrenia represented an arrest of all psychic life at the developmental stage of puberty. Against this argument is the fact that a large number of cases of severe debility show a regression and not just an arrest of mental development. In premature dementia we still find many features which we recognise easily from healthy developmental stages. For example, there is the inclination to read inappropriate material, the naive preoccupation

with lofty problems, an immature and over-ready speed of judgement, and a delight in catch-words and high-sounding modes of speech . . .

The real nature of dementia praecox is totally obscure. The most common view at present is that the illness occurs when an individual's inadequate constitutional faculties gradually cease to function. Like a tree whose roots no longer find nourishment in the earth available to it, mental powers dwindle as soon as an insufficient natural endowment makes further development impossible. There are, however, serious objections to this point of view. It is hard to see why an organism which has hitherto developed in a healthy or even energetic way should suddenly, and for no particular reason, not only come to a standstill but even deteriorate into chronic sickness. Even the most severely morbid predisposition – which is not particularly common in dementia praecox anyway – would hardly suffice to explain such a process. Moreover, those mental disorders which are known to be associated with hereditary degeneration do not show this kind of sudden mental deterioration: in such cases periodic illnesses or persistent morbid states with a very slow development are more common.

For these reasons I consider it more likely that what we have here is a tangible morbid process occurring in the brain. Only in this way does the quick descent into severe dementia become at all comprehensible. It is true that morbid anatomy has so far been quite unable to help us here, but we should not forget that reliable methods have not yet been employed in a serious search for morbid changes. In the light of our current experience, I would assume that we are dealing here with an auto-intoxication, whose immediate causes lie somewhere in the body. This assumption seems to me to be supported by the appearance of fairly significant physical signs in the nerves and muscles of patients with dementia praecox. If we consider the tendency for the illness to strike at the age when sexual development is still taking place, then it is not out of the question for there to be a connection between the illness and some processes taking place in the sexual organs. These are, of course, only provisional and very indefinite hypotheses.

It is of the greatest practical importance to diagnose cases of dementia praecox with certainty and at an early stage. The main differential diagnoses are periodic insanity [manic-depressive psychosis, Tr.], paranoia and organic psychosis due to a recognisable physical illness. The features which suggest dementia praecox rather than periodic insanity are a slow onset, less intense symptoms, and signs of acquired mental debility. Against paranoia are a rapid development, the scant

and confused nature of such delusional ideas as are present, and the growing mental impairment that very soon becomes apparent. In our current concept of paranoia, however, there are transitional forms, which we may possibly come to recognise as special types of the dementing process. In favour of a typical organic psychosis would be an acute impairment of all mental functions, a sudden onset and the accompanying physical signs. In addition, many cases of dementia praecox are wrongly diagnosed as mental subnormality. In view of the great prognostic difference between these two disorders, such mistakes exact a bitter toll. It is very difficult to differentiate between dementia praecox and innate imbecility. I have had several patients with apparent severe mental deficiency, brought to me from the workhouse with convictions for begging, vagrancy and similar offences, who were incapable of giving even the most meagre information about their past lives. It was later possible to demonstrate, however, that they had some vestiges of passable scholastic attainment; in one case, for example, letters were obtained which showed that the patient, who was not a complete imbecile, had a few years earlier been able to travel in a planned way and to express his thoughts with fluency and skill. It was clear, therefore, that it was not a question of mental subnormality, but of acquired dementia praecox. Such cases are of particular interest to military physicians, as symptoms of illness frequently appear just before or during military service and may then easily be mistaken for deliberate simulation.

Given our present ignorance of the causes of the illness, the treatment of dementia praecox offers few points for intervention. One may perhaps assume, however, that timely safeguards against aggravating the cerebral condition, combined with treatment of sleeplessness, excitement and refusal of food, may halt the mental deterioration at a certain stage, and this may facilitate the use of what has not yet been destroyed. Once the acute stage of the illness is quiescent, it becomes a question of instituting cautious mental exercise of such abilities as are still present, in order to protect these residual abilities from the atrophy that may take place if they are not used.

Reference

Hecker, E. (1871) Die Hebephrenie. *Virchows Archiv für pathologische Anatomie* **52**, 392–449.

Otto Diem (circa 1895–)

Otto Diem was born in Switzerland, where he spent his whole professional life. He trained under Eugen Bleuler at the Burghölzli Clinic in Zurich and then devoted himself to clinical psychiatry in Lucerne.

His article on simple schizophrenia or dementia simplex was probably suggested by Eugen Bleuler and was an elaboration of an earlier idea of Arnold Pick's. Nevertheless, it is one of the few clinical studies in the literature of a condition which, although controversial, has become part of established psychiatric nosology.

The simple dementing form of dementia praecox

O. Diem (1903)
(Die einfach demente Form der Dementia praecox. *Archiv für Psychiatrie und Nervenkrankheiten* **37**, 111–87)

Case histories

The following cases are presented to illustrate the argument of this paper.

Case 1

The patient was a lively boy, with no particular behavioural problems. He successfully attended state school, then technical school and finally completed a three-year apprenticeship as a photographer. He took part in the campaigns of 1866 and 1870 as a non-commissioned officer in the German army. Then he began work as a photographer but drifted around restlessly as an assistant or journeyman, never staying longer than three years in one place. He changed jobs in order to 'see something new', never because of disagreement with his employers. Two attempts to set him up in business on his own account failed miserably. He lost all his money, evidently because he took too little trouble and was too lighthearted in his approach to the undertaking. He married during this period, at the age of about forty, but his wife died a few years later; the marriage was apparently a happy one. He then left his parents-in-law to look after his children and thereafter did not bother about them in the slightest. From then on he never prospered, although he was active in all kinds of affairs,