The nursing of nervous and mental diseases : a lecture delivered to the senior nurses, Albany General Hospital, Grahamstown / by T. Duncan Greenlees.

The Nursing of NERVOUS AND MENTAL DISEASES:

A LECTURE

DELIVERED TO THE SENIOR NURSES,

ALBANY GENERAL HOSPITAL,

GRAHAMSTOWN,

BY

T. DUNCAN GREENLEES, M. B. Edin.

MEDICAL SUPERINTENDENT, GRAHAMSTOWN ASYLUM.

Reprinted from THE HOSPITAL.

Printed at The Asylum Press,
GRAHAMSTOWN, 1896.

The Nursing of NERVOUS AND MENTAL DISEASES:

A LECTURE

DELIVERED TO THE SENIOR NURSES,

ALBANY GENERAL HOSPITAL,

GRAHAMSTOWN,

BY

T. DUNCAN GREENLEES, M. B. Edin.

MEDICAL SUPERINTENDENT, GRAHAMSTOWN ASYLUM.

Reprinted from THE HOSPITAL.

Printed at The Asylum Press,

GRAHAMSTOWN, 1896.

PREFACE.

The following Lecture was delivered to the Nurses of the Albany General Hospital, as a conclusion to a course of training on General Nursing by the Medical Staff. The necessity for the Hospital nurse to possess some practical knowledge of nervous and mental diseases, and of the means employed to alleviate these conditions, is becoming more evident as the sphere of their educatian is extending, and it is with the object of still further distributing such information among nurses, in this Country especially, that I have reprinted the lecture from the pages of "*The Hospital*" for February and March, 1894.

In submitting this Lecture to the notice of those interested in advancing the education of Hospital Nurses an apology is due for any deficiencies—especially those necessarily arising from a condensation of extensive and important subjects, such as are briefly glanced at in these pages.

T. DUNCAN GREENLEES.

Grahamstown Asylum,

South Africa, 1 February, 1896.

INTRODUCTION.

I. The Nervous System:

(a) Brain: *(b)* Spinal Cord: *(c)* Nerves: *(d)* Sympathetic System.

II. Diseases of the Nervous System:

(a) Organic *i.e.* Apoplexy: *(b)* Functional *i.e.* Hysteria: *(c)* Spinal Disease. *i.e.* Locomotor Ataxia.

III. The Treatment of Nervous Diseases:

Methods:

A Electricity,
- (1) Faradism.
- (2) Galvanism.
- (3) Franklinism.

B Massage,
- (1) Stroking, or *Effleurage.*
- (2) Massage, *à friction.*
- (3) Kneading, or *Pétrissage.*
- (4) Percussion, or *Tapôtement.*

C Baths,

(1) Hot. (2) Cold. (3) Medicated. (4) Plunge. (5) Shower. (6) Combinations.

D Hypnotism.

IV. Mental Diseases:

The Nursing and Management of the Insane.

I.—INTRODUCTION—THE NERVOUS SYSTEM.

To become a successful nurse of those suffering from nerve disease, and to know how to manage the mentally afflicted, requires a special education as well in these subjects as in those already acquired during the course of training previously received in a general hospital.

The asylum physician has not only to be an expert or specialist in insanity, but he is likewise required to possess a thorough knowledge of general diseases, the existence of which is not unfrequently the sole cause of the mental trouble. So also the nurse who undertakes the care of nervous and mental cases should be at the same time conversant with the general principles of nursing, as well as with those rules that specially apply to this branch of her profession, and a nurse's education is incomplete unless she has undergone both a theoretical and practical training. The time has passed when a nurse is considered proficient when she knows how to make a poultice, although ignorant of the uses of moist heat, and of its physiological action on the tissues. As the field of medicine is opening up, and widening for medical men, so also is the noble profession of nursing increasing its scope of usefulness, and acting as a hand-maiden to progressive medicine.

My present remarks must necessarily be short, and to the point. *Ars longa, vita brevis* may well be exclaimed when studying this vast subject! I can do no more than glance superficially at the different headings, reminding you that this lecture is merely an introduction to the many text-books on this subject which are now published Unfortunately, these books mostly treat the matter in a disjointed and prolific manner, and my endeavour will therefore be to so arrange and condense the subject as to present it in a condition suitable for easy assimilation.

The Nervous System.

The nervous system comprises the brain, spinal cord, nerves, and sympathetic system. The brain is a complex organ, and forms the fountain-head of all nerve action. In structure it consists of cells, fibres, and a cementing substance, the neuroglia. The cells are chiefly congregated over the surface in a layer called the cortex, and the main portion of the brain is made up of fibres and neuroglia, with several masses of cells scattered throughout, called ganglia. The cortex or grey matter presents, under the microscope, several layers of cells which are, in reality, the terminal organs of most of the nerves of the body, and any derangement in their functions likewise affects the functions of the nerves whose end-organs they form. These cortical cells are connected with the fibres forming the main bulk of the brain, called the white matter; and, converging towards a point at the base of the brain, cross each other before passing out, as nerves, to supply the various muscles of the body. This is called *decussation of the nerve fibres*, and explains the fact that any injury to the cortical cells on the one side of the brain affects the nerves and muscles on the opposite side of the body. Thus is produced "*cross-paralysis.*" It is the fore part or frontal region of the brain that is concerned in the mental faculties; here reign supreme thought, memory, the will, and the emotions, and within these cells is evolved our intelligence. What changes take place in these little masses of protoplasm that result in the exercise of will, or in the display of passions or emotions cannot be asserted yet. Science has not liberated the exact truth from the realms of theory on this subject.

While the frontal region forms the supreme headquarters of all thought and motion, there are other "subordinate centres," as they are called, distributed over the cortex. These centres form the terminals of nerves supplying certain muscles, or groups of muscles, and special sense nerves. For example, there are centres for movements of the legs and arms, and another for the muscles

of the face; likewise centres for the senses of sight hearing, and smelling, as well as for some other functions and senses. When, however, voluntary movement is concerned then the will is cognisant, and the energy or nerve force for the movement is primarily evolved from within the frontal area of the brain cortex.

The spinal cord, for the most part, merely forms a medium for the conveyance of motor and sensory impulses to and from the brain. In addition to this function, however, it is capable of exercising certain functions and controlling certain movements when the brain is inert or sleeping. These functions, highly developed in the lower animals, such as the frog, in man are only organic, and may be exemplified by the simple experiment of tickling the feet of a sleeping person, producing movements of the limbs.

The nerves are the telegraph wires, as it were, along which neural impulses pass from the brain to the periphery. A nerve contains two sets of fibres—motor and sensory—and therefore division of a nerve severs all connection between the brain and the parts supplied by the nerve; over this area we therefore obtain, as a result of the division of the nerve, paralysis, or loss of motion, and anæsthesia, or loss of sensation.

Should the motor fibres alone be injured, then paralysis only results; and, should the sensory fibres be severed—a condition rarely found—anæsthesia alone is produced. While paralysis is frequently accompanied by loss of sensation, the latter condition is rarely met with without some motor impairment.

The sympathetic system consists of numerous groups of nerve cells and fibres, arranged in masses, and distributed throughout the body—the main chains being found on either side of the spinal column. These masses of cells, called ganglia, are likewise to be found within the walls of the heart, and in the muscular coat surrounding the intestines, as well as within the walls of the blood vessels. From their situations it may be inferred they are concerned in the movements of what are known as involuntary muscles—those muscles whose actions are

independent of the influence of the brain. The sympathetic nerve fibres have, however, a distinct connection with the brain, and are intimately connected with it by means of the senses, as is seen in the following examples: Intense passion or emotion, arising as it does within the frontal lobe of the brain, causes flushing of the face: this flushing is due to a relaxing and consequent dilatation of the minute blood vessels which supply the skin of the face; an increased volume of blood can thereby pass through the vessels, and here we have the blushing of the countenance. Further, fear has exactly the opposite effect; constricting the blood-vessels narrowing their lumen, a diminished supply of blood to the face produces the pallor or paleness of fear. Again, palpitation, an irregular action of the heart muscle, is frequently due simply to emotion arising within the cranial cavity, and is caused by a disturbance in the functions of the cardiac sympathetic ganglia.

We thus see how close and intimate is the connection existing between the body and the brain, between mind and matter, between physical conditions and mental states, and, although a disease may not necessarily be localised within the immediate confines of the nervous system, yet so close is this connection that the brain, if not the entire nervous system, is bound to suffer from pure sympathy.

II.—DISEASES OF THE NERVOUS SYSTEM.

It will suffice now perhaps merely to briefly note several of the more important symptoms that characterise disease or injury when the nervous system is implicated. Firstly, the organic forms (*i.e.* where there is an alteration in the structure, or a destruction of the tissues), I may refer to those diseases attacking the brain itself; and secondly, those affecting the spinal cord alone. Of the former class the best example is to be found in apoplexy, where a vessel ruptures within the brain, and the blood is effused into the tissues. According to the locale or

position of the rupture, paralysis of one or other series of muscles results, or consciousness is lost. Should the rupture take place low down in the brain, and implicate one or other of the vital centres, death takes place immediately.

In ordinary apoplexy the person usually loses consciousness suddenly, and drops down without any warning; the breathing is laboured, and at each expiration the cheeks are puffed out, the pupils are unequal, the conjunctivæ insensitive, and some paralysis of the legs or arms is generally met with. This paralysis is usually one-sided, and, on the paralysed side, pricking the skin meets with no response, shewing the loss of sensation. Should the effused blood become absorbed, then the paralysis may pass off, but only provided the brain tissue has not been destroyed.

In the case of disease of the spinal cord, the paralysis usually attacks both sides of the body equally, and should the disease be high up in the cord so as to implicate the nerves supplying the arms, the arms are likewise paralysed; this condition is, however, hardly consistent with life.

The most frequent form of disease found in the spinal cord is a sclerosis or hardening of the tissues following usually upon an inflammatory process, the result of a chill or specific disease. Here the nerve tissues are replaced by a sclerosed patch, and the functions of all the nerves below the spot are obliterated. As a result of this, neural nourishment is cut off from the muscles, these become gradually paralysed, and atrophy or wasting sets in; the patient becomes bed-ridden; bed-sores tend to form, and, in the majority of cases, death closes the unhappy scene.

When disease attacks an individual nerve, all the muscles supplied by that nerve are paralysed, should the disease (or injury) be such as to prevent nerve impulses passing from the brain to the muscle or muscles.

Of the various forms of functional disorder of the nervous system the best example is hysteria. A "functional disease,"—or more correctly "disorder"—exists where no appreciable organic disease can be discovered, where no change has occurred in the structure of the organ. As our

knowledge of nervous diseases increases the number of "functional disorders" diminishes, and scientific means, such as electricity, chemistry, and the microscope—by throwing light on hitherto dark and obscure questions—are proving that even in a "functional disorder" some change, of a morbid character, occurs in the molecules forming the cell or tissue. Hence the term "functional disorder" must be taken provisionally.

Hysteria is a well known condition of the mental and nervous systems. Common in females of a certain age, it is not unknown in the stronger sex. It is characterised by symptoms of a most varied kind: from slight emotional feeling to a condition of intense excitement; from an apparently simple fit to what would seem, to the uninitiated, a most serious apoplectic seizure, together with innumerable intermediate conditions. Nevertheless, its diagnosis is not difficult when taken in consideration with the age of the person, a probable previous history of hysteria, and on closer examination, an entire absence of all those physical symptoms which indicate total and absolute loss of consciousness. In nine cases out of ten its diagnosis is easy, but often in the tenth case even the doctor mistakes a grave organic cerebral or spinal disease for hysteria, and in such a case the result does not reflect much credit on his professional acumen.

In the borderland between functional disorders and true organic disease, many forms of hystero-epileptic conditions may be classified. Here the seizures are not so severe, nor are they followed by so marked mental disturbance as they are in ordinary epilepsy, but there is no sharp line of demarcation to be drawn between the two conditions, and one not infrequently merges into the other.

Treatment of Nervous Diseases.

The advances that have been made during recent years in the treatment of nervous diseases can only be compared to the progress made in their pathology. Many of the means employed in the treatment are, however,

still within the sphere of empiricism; it will be some years yet before the following methods will be made use of by every general practitioner, and before his consulting-room will be replete with all the instruments necessary to the diagnosis and treatment of nerve diseases. When a medical man does undertake the treatment of such cases it is of the utmost necessity that his nurse, who ought to be his right hand as an assistant, should possess such a knowledge of the methods employed as will enable her to prove herself a useful and intelligent help to her employer.

a. Electricity.—The three forms of electricity most frequently used in medicine are Faradism, Galvanism, and Franklinism.

1. *Faradism.*—The machine consists of a cell and double coil, and this is the battery most commonly used, unless a large number of cells—and consequently a stronger current—is required. The Faradic current, generated within the cell, is conserved in the coil, and is carried thence, when in use, along insulated wires.

2. *Galvanism.*—Here the current is derived directly from the cells. Any two dissimilar substances, such as zinc and carbon, if immersed in an acid or saline fluid and then brought in contact, generate electricity, and this constitutes a battery of one cell. Galvanic batteries generally contain a number of these cells, whose forces can be united to produce a powerful current, or only one cell may be used when a weak current is desired.

3. *Franklinism* is obtained from the friction of two discs of glass, the one stationary, the other revolving rapidly on its own axis. In this form of electricity a flash of light is generated, and ozone, a peculiar transformed condition of the atmosphere, is appreciable to the sense of smell. This form of electricity is rarely employed in medicine, and the machine now is chiefly used in laboratories for the purpose of demonstrations.

Electricity is of use in all diseases of the nervous and muscular systems where the functions are not completely obliterated or destroyed by organic tissue change. Where there is such a change in the tissue—whether nervous or

muscular—as to prevent the proper flow of neural impulses from the central to the peripheral organs, then electricity in the treatment of disease is of little benefit. We can, however, in these cases imitate nature. Thus, after apoplexy, sometimes one or other of the limbs are paralysed; this is due to an arrest in the nerve current from the central organs, the brain to the muscle, or groups of muscles affected. Now in this case the muscles are healthy, the nerves supplying these muscles are likewise healthy; it is only the brain that is diseased. If nothing is done, the muscles from disuse, waste and become atrophied. To induce muscular contraction, and thereby imitate nature, an electric current is passed along the healthy nerves; this stimulates the muscles to contract, and, for the time at least, their functions are artificially restored. If this treatment is persevered in, the paralysed limb not infrequently regains its wonted plumpness, and, if the brain in time recovers its health, the normal functions return to the limb likewise.

Faradism suffices for all cases where the paralysis is due to a central lesion, such as the example given when the paralysis is caused by disease of the brain. If the disease, however, is due to some peripheral cause, such as chronic rheumatism, lead poisoning, or writer's cramp, then galvanism will be required.

To reach the nerves, certain points, called motor points, have been mapped out on the surface of the body, these represent the inlet and outlet of the different nerves. In applying electricity the electrodes, or poles, as they are called, are placed over the motor points of whatever muscle, or group of muscles, require stimulating. The poles of an electric machine are termed positive and negative; if an ascending current is desired, the positive pole is placed over the outlet, and the negative pole over the inlet of the nerve; while, when a descending current is indicated the position of the poles is reversed.

These poles or electrodes are made of different shapes to suit different portions of the body, and their surface is generally moistened with a saline solution before ap-

plication, to enable the current to reach the nerve with greater ease.

There are certain dangers to be avoided and cautions to be observed in the application of electricity to the treatment of disease. When first applied a weak current should always be used, and, if necessary, gradually increased in strength.

The séance, or sitting, should at first not last more than a few minutes; afterwards, as the patient gets accustomed to the applications, the sitting may be prolonged to half an hour, or even longer.

The cases for electric treatment should be carefully selected by a medical man, and no nurse should attempt this treatment without the advice and supervision of the medical attendant. Injury of a permanent character has followed the injudicious application of electricity, or the sudden application of a very strong current in persons peculiarly susceptible to its influence. Blindness has been produced by a current passed through the head, and vertigo and fainting occur when the current has been made too strong. Muscle and nerve functions have been permanently abolished by strong currents or prolonged séances, more especially where the treatment is persisted in until exhaustion results. This should never be done; contraction can be produced by stimulation of a muscle, but if the stimulation is too powerful and long continued, the muscle becomes exhausted and its power of contractibility is destroyed.

In mental diseases electricity is not without its use in stuporous cases, and those cases of melancholia that seem simply to require rousing up, and the application of a weak current through the head—the positive pole being placed over the forehead and the negative to the nape of the neck—sometimes produces very satisfactory results. Again, in some cases of moral insanity the electric current has a beneficial effect as a moral deterrent, although its general uses cannot be recommended for such patients; and, indeed, in insanity there are really very few cases where this treatment alone has produced such results, as

might almost be expected from knowledge of its powerful and beneficial effects in nervous diseases.

B. MASSAGE.—This form of treatment was known to the ancients, and has recently, namely, during the last 10 or 15 years, been revived. Like most of the modern methods, it has its enthusiastic votaries, who claim for it a specific action in all diseases, and is said by them to be the panacea for all the ills that flesh is heir to. This is a curious fact in modern scientific medicine; that there is a continual searching for something new, and, when found, it is applied to the treatment of every disease. Enthusiasm regarding the good qualities of a drug blinds common sense, and haste is made to see and to note imaginary benefits arising from its use. After a time the enthusiasm cools down, and the treatment is relegated to the things of the past, unless it is really proved of some use: then it finds its position in one of the many sub-divisions of the extensive science of therapeutics. So with massage: formerly looked upon as a "cure-all," it is now beginning to occupy a more definite, although more limited, position in the treatment of disease, especially in neurotic and hysterical cases, as well as in chronic rheumatism and constipation from atomy of the intestinal or abdominal walls.

The word massage means to rub or to press softly, but the process includes kneading the muscles in the same way as the baker kneads the dough.*

No person should set up as a masseuse—for it is a trade or profession nowadays—without special training, for the procedure is not only complicated, but to an inexperienced person, very exhausting.

Massage is the name applied to several different methods, to each of which brief reference will be made.

1. *Stroking (effleurage).*—Here the points of the fingers or the palm of the hand start from a point on the distal side of the affected part, and, with slight pressure, are made to pass over the affected part to the proximal

* Massage (Gr. *Masso*, to knead). The methodical kneading, manipulation, rubbing, and beating of the limbs and trunk.—Mayne's "Medical Vocabulary."

end. This motion is immediately followed by the other hand going through the same process, and so on in succession, one hand following the other at very short intervals.

2. *Massage à friction*, or rubbing, is a forcible pressure, with an accompanying motion of the hand forwards. In this form the hand or fingers press upon the affected part and a circular motion is maintained, the pressure being kept up meanwhile.

In stroking, or *effleurage*, an endeavour is made to act upon the cutaneous surface, while in *friction* our object is to influence the deeper tissues, such as the muscles.

3. *Petrissage (or kneading)* consists in grasping a portion of tissue, generally an individual muscle, between the thumb and the fingers, and, lifting it up as it were from its bed, exercising upon it a considerable amount of pressure. Both hands may be used in this process at the same time; the action is thereby rendered much more energetic, although it is more exhausting both to the operator and patient.

4. *Tapôtement, (or percussion)* is carried out either by the palm of the hand, the curved fingers, the closed fist, or by means of instruments specially constructed for this purpose, but whose action is similar to that of a hammer. When the hand is used, and the object is to percuss superficial nerves, then the action takes place from the wrist, in the same way as the chest is percussed, but when it is wished to reach deeper-seated tissues, then the wrist is fixed, and the action takes place from the elbow, or even shoulder.

A masseuse should learn to use her hands equally well, for then the treatment is more continuous, and, for the most part, not so exhausting to the operator.

While it is quite possible for the massage treatment to be too severe, and even bruise marks result, there is the possibility of going to the other extreme and making it too mild or gentle; in this, as in all other things, there is a happy medium, which can only be learned by experience. The area of the body to be treated should be gone over thoroughly; one part should not be energetically

massaged and the other part superficially so, perhaps on account of the operator feeling exhausted.

Passive movements of groups of muscles or of individual muscles may be ordered by the physician in certain forms of nerve disease or muscleatomy. In such cases "duplicated active movements," as they are called, are generally advised. Here the operator performs a movement, or a series of movements, with the patient's muscles, which the patient is enjoined to resist to the utmost of his strength. Thus, in the case of a partially paralysed arm, the arm is straightened out gradually, the patient all the while resisting the operator's attempts to flex it to the shoulder. The operator, during these efforts of the patient, should gradually give way to them. The arm is now flexed by the operator, who enjoins on the patient the necessity of resisting his efforts, and here again the operator permits his patient's efforts to overcome his own.

It is quite evident that in many conditions where the paralysis is local and not complete, such treatment judiciously applied, and aided by the other methods previously referred to, should result in good to the palsied limb, and even, in time, recover its lost motor power.*

C. Baths.—In the treatment of nervous and mental diseases the bath, whether simple or medicated, is frequently made use of, and every institution admitting all classes of patients should possess a properly arranged series of baths. Further, it should form an essential part of every nurse's education to be thoroughly conversant with the different forms of baths in use, as well as the methods of applying them. This is a portion of the duties that is generally assigned without any medical aid whatever, as presumably nurses have already been instructed in the use of the bath in the treatment of many diseases such as fever; therefore, reference to them is only made so far as they apply in the treatment of nervous and mental cases.

In some spinal affections, such as myelitis and spinal

* For much of the information contained in the sections "Electricity" and "Massage" I beg to express my indebtedness to Dr. Mills' "Treatment of Mental and Nervous Diseases." English edition. Published by Baillière, Tindall & Cox.

irritation, the alternate application of heat and cold, or even iced water, to the spine is often beneficial. The wet pack is frequently used in delirium and mania; it should only be used, however, under the instructions of the physician, and the nurse should always remain with the patient during its application, for under its powerful influence shock to the nervous system and cardiac failure has been known to occur. After the removal of the pack the patient should be rolled up in warm blankets, the body having been previously rubbed down with a coarse flesh towel. In cerebral congestion the combined bath is sometimes used; here the patient is seated in a bath, the water being at a temperature of 110 deg., and a shower of cold water, either continuous, or as a spray, is made to fall on his head.

The immersion of the entire body in a hot bath for a considerable time, say three to six hours, the water being maintained at an equable temperature, is useful in some cases of acute mania, and in ordinary insomnia; and the compulsory showerbath, given morning and evening, and lasting not longer than 25 to 30 seconds, is one of the most successful means of treating melancholia and some cases of acute mania when the physical health is good.

The application of alternate dry heat and cold has been found beneficial in some forms of spinal disease, and ingenious instruments have been constructed with the object of making the intervals between the application of the heat and cold as short as possible.

Finally, there are innumerable numbers of medicated baths, in which the object is to induce the skin to absorb the various medicines held in solution; these kinds of baths are very extensively used in hydropathic establishments, and prove of use in cases of gout and chronic rheumatic troubles.

Hypnotism.

Hypnotism, or the treatment of disease by suggestion, is one of the most modern forms of therapeutics, and in neurotic and hysterical females in France has proved of

benefit in the treatment of such conditions. The Saxon is less impressionable to hypnotism than the Gallic type, and therefore the English manipulator has not the same mesmeric influence over his subject that his brother—the more effervescing Frenchman has. This explains the fact that in the hands of English experimenters this treatment has not met with the same success that it has done apparently in France and even in Germany.

In speaking of hypnotism it must not be taken to mean that form of trance seen on the stage, when charlatans, for a monetary consideration, are prepared to go to sleep, and to do and say foolish things for the amusement of the audience.

Modern hypnotism consists in a peculiar state of mind in which the subject (or medium) is acutely alert to the suggestions of the operator, and the condition is generally induced by the temporary exhaustion of one or other of the senses—that of sight most frequently.

Without entering into the details of the process, which would take up too much time, it may here be stated that hypnotism has proved of great benefit in the treatment of many functional nerve disorders; local anæsthesia and hyperæsthesia occurring in hysterical subjects are amenable to its influence. Relief from pain, which at first is temporary, but, after repeated séances, becomes permanent when the cause is due to some functional disorder of the nerve, such as ordinary neuralgia; and in a few cases of insanity the habits of the patients have been improved, delusions dispelled, the maniacal soothed, and sleep induced, all by suggestion, while the subject was under the hypnotic influence.

It might be almost imagined that in this treatment the cure had at last been found for neurotic conditions. Unfortunately, while admitting in certain suitable cases extraordinary results, only a very few persons are really susceptible to the influence of hypnotism, and it is only these very few who can participate in the advantages following this treatment. This explains the reason why, although its benefits are extensively published, and its cures

noised abroad, many cases of neurotic disorders still remain to be treated, and, so far, the fame of hypnotism does not seem to be spreading.

The science (or "art" may it be called?) is still in its infancy when considered scientifically, although there is no doubt it was known to the ancients under different names; the influence of one mind over another has long been recognised, but so far as a thoroughly scientific explanation of the process is concerned, it is still in the hazy region of experimental research. A nurse is not likely to be asked to hypnotise a patient unless the gift is specially possessed by her. Then it is her duty to place herself entirely in the hands of the physician, and follow his advice most carefully with regard to using this influence over the patient, never forgetting that such a power is enormous in its influence for good or evil; therefore it must be carefully used and never abused.

IV.—MENTAL DISEASES.

When speaking of the brain I mentioned the frontal region as the headquarters of the will, emotions, intellect, and passions; in other words, the frontal lobe is the seat of the mind. In a certain number of mental diseases no organic lesion in this portion of the brain can be discovered; and it is, therefore, compulsory to adopt the term "functional" again for this class of diseases. It is an extremely difficult thing to define the term "insanity" or mental disease. The most simple definition is that "it is a departure from the normal condition of one's mind," but this is not sufficient, and proves or explains nothing: what may be insanity in one person or race may not be insanity in another. Thus foreigners have many curious customs, and the native races of South Africa have many strange ideas, which, if seen amongst English people, would be put down to eccentricity if not madness.

A person to be legally insane must be proved dangerous or troublesome to himself or others; if he is suicidal he requires to be protected against his desire to kill

himself, and if he is dangerous to others society demands that he should be restrained from committing a crime.

Insanity is a generic term, and includes many different forms of mental disease; occasionally doctors speak of mania, melancholia, and so on, so that it is advisable for nurses to know something of the various forms, to understand intelligently what is meant by these various terms.

When nursing a patient, however, it is most injudicious to speak of his illness or give it a name. If the patient should not be too ill to understand, the thought of being insane is sufficient, in some cases, to interfere materially with recovery. To the ignorant public there is something repulsive and hopeless in the mere word, and the mention of insanity in some families is sufficient to stir up trouble.

Insanity has been classified times out of number; every writer has a classification of his own, and every classification has some points to recommend it. That which I adopt is not original, but can be recommended for its simplicity:—

A. Forms of insanity depending on undeveloped brain.—(1) Idiocy, (2) Imbecility.

B. Forms of insanity depending on disease of the brain.—(1) Mania or mental exaltation—(*a*) Acute mania, (*b*) Chronic mania, (*c*) Delusional mania. (2) Melancholia or mental depression—(*a*) Acute melancholia, (*b*) Chronic melancholia, (*c*) Delusional melancholia. (3) Dementia or mental enfeeblement—(*a*) Acute dementia, (*b*) Chronic dementia, (*c*) Organic dementia. (4) General paralysis of the insane. (5) Insanity associated with epilepsy—(*a*) Epileptic mania, (*b*) Epileptic melancholia, (*c*) Epileptic dementia, (*d*) Epileptic imbecility.

It must not be supposed that this classification includes all the forms of mental disease; indeed, while we speak of "insanity associated with epilepsy" we might also mention the forms associated with every disease, both of brain and body, known; for all practical purposes, however, the above description will amply serve.

(1) *Idiocy and Imbecility.*— These forms of mental disease, or defect, are either born with the individual or commence very early in life, before the brain has fully developed. In imbecility the growth of the brain is arrested, sometimes by convulsions in childhood, or by fits while teething, or by some of the fevers. An idiot, on the other hand, is born an idiot: the growth of the mental powers is arrested at birth, and the brain never grows again, so that in such cases education is useless.

The power of speech is one of the earliest faculties developed, and an idiot is a person who cannot speak, and who has never learned the art of language; an imbecile is a person who can speak, it may be very imperfectly, but whose mental faculties remain as in childhood, even although he may attain the bodily development of a man. His character is always childish, his habits are those of a child, and he requires the same amount of humouring and attention. He has to be treated with great forbearance and kindness, for he has no control over his feelings and emotions, and he is just like other children in being liable to outbursts of uncontrollable and causeless passion. Of course in this condition, as in other diseases, there are degrees; from the person who is simply slightly weak-minded to the helpless imbecile there is a great difference; nevertheless, the condition is the same, and the question here is only one of degree.

In the other forms of mental disease the brain has attained to the limits of its development, and, from some cause or other, its functions have become deranged or diseased.

(1) *Mania or Mental Exaltation.*—In this condition the distinguishing characters are excitement of manner, rapidity of movement, noisy and frequently incoherent conversation; the general conduct may be fussy, extravagant and boisterous, and the habits are frequently depraved. In these cases the controlling will-power has lost its influence over the other functions of the brain, chiefly motor, and, as a result, these functions, like an engine whose regulator is broken, play without any control.

In acute mania the symptoms are most marked. The patient is sleepless; his strength, seemingly enormous, is in reality short-lived, and there is great and rapid tissue waste. This waste of tissue is seldom counter-balanced by good feeding, and the result is that the system rapidly gets run down, and an almost typhoid condition supervenes, unless the symptoms are alleviated. Cases of mania are called chronic when the symptoms have lasted for some time, and in them the excitement, &c., is less marked and violent. Asylum physicians are accustomed to look upon cases of mania as chronic where the disease has lasted for two years or upwards. There are certain patients in asylums, or for that matter outside asylums, who have delusions or ideas of an exalted or happy character. These persons are neither dull nor depressed, neither are they excited to any marked degree. They are the subjects of delusional mania, and their delusions, as a rule, influence their habits and conduct.

(2) *Melancholia or Mental Depression.*—Here the symptoms are the exact opposite of those I have been describing. Dulness and unhappiness are the chief characteristics of the minds of melancholic patients. In the acute variety they are extremely wretched; they are unable to remain at peace for any length of time; they display the greatest fear or terror, wringing their hands and moaning continuously. They dread some impending calamity, or they believe they have committed an unpardonable sin, and that their souls are doomed to everlasting punishment. They are rarely violent, but may resist stubbornly anything and everything that is done for their good. They resist being undressed at night, and again in the morning they struggle vigorously against being dressed. They refuse food, perhaps believing it to be poisoned, and it would seem in some cases that their sole aim is self-destruction; although, in other cases, their great fear is death, and they are constantly bemoaning the fact that some calamity is about to occur whereby they will be destroyed. As in acute mania, so in this condition, the system soon runs down unless sleep is procured and the

mental symptoms allayed.

In the chronic form of melancholia the symptoms are similar in character, but not so intense as in the acute form. Occasionally these patients are liable to short-lived attacks of cheerfulness, sometimes even passing into excitement, but they soon return to their unhappy condition. Reserved in their habits, despondent in their conversation, gloomy in all their ideas, deficient of interest in life or in their surroundings, these patients are easily recognised. They seem to be completely absorbed in their thoughts, brooding, it may be, over some imaginary wrong they have done, or some sin they are guilty of; in some cases they are quietly maturing means to elude the vigilance of their nurses, and do them, or themselves, an injury. They sleep badly, nutrition is impaired, they lose flesh, have a sallow complexion, and they are frequently affected with constipation. They are indifferent to the quantity and quality of the food given them; and, if not carefully watched, they will starve themselves. They require rousing from their lethargic, indifferent condition, otherwise there is great tendency for chronic melancholia to slowly merge into incurable dementia.

In delusional melancholia the depression and despondency are only moderately evident as a rule; the patient, in this form, expresses delusions of a melancholic character without these delusions affecting, to any marked extent, his conduct. Thus, while they may consider themselves the most miserable creatures alive, they enjoy life fairly well, and may take an active part in the entertainments got up to amuse them. Their delusions are often of a suspicious kind, *i. e.*, that they are the objects of divine or human persecution. Sometimes they become homicidal, as, for example, when they think some one is conspiring or plotting against them.

While the suicidal tendency is one of the chief characteristics of melancholia, sometimes the natural love of life is excessively developed, and there is great fear lest they are about to be destroyed.

When melancholia alternates with mania, and is suc-

ceeded by a transient stage of apparent sanity, the condition is termed circular insanity.

(3) *Dementia or Mental Enfeeblement.*—The tendency of all cases of acute insanity is towards dementia, and it is the object of all treatment to prevent this. Many cases of mania and melancholia, especially when there is a hereditary taint, when they do not recover, pass into dementia. In such cases the brain becomes exhausted, or "played out," from prolonged and abnormal excessive energy; it is unable to recover its former powers, and then becomes enfeebled, and the mental faculties become permanently deadened. Acute dementia is usually due to a well-defined disease of the brain; its onset is, as a rule, sudden, and occasionally in these cases recovery takes place. Chronic dementia is that form of disease so well known in asylums, as it forms perhaps the larger proportion of the entire population of any ordinary asylum. It generally follows an attack of acute insanity, when the brain storms have been of such severity as to irreparably injure and destroy the brain functions. The patient after a long bout of excitement, during which the nerve exhaustion is extreme, gradually settles down and becomes quieter. Instead of this quietening down being accompanied by an awakening of the intellectual faculties, as would occur in recovery, the patient has a stupid, dazed, expression, and his conduct is depraved. He will not speak, he seems deprived of feeling and intelligence; his movements become automatic, and he is generally found standing about with his head hanging down, staring vacantly, and perhaps with the saliva dribbling away from his mouth. When questioned he will not answer; his memory seems destroyed; he cares for nothing; his best feelings and emotions are dulled or obliterated altogether. Told of his wife's death, whom he formerly loved dearly, no notice is taken; his features remain immovably stolid. If the patient is a woman, and her child is brought to her, she may look at it, but no smile of recognition lights up the set countenance. The maternal instinct—that most powerful of all the emotions—is absent, and nothing seems

to arouse in these patients a feeling of interest, grief, or pleasure. The mind, in fact, is a complete blank, and external influences fail to make any impression on it. The eye can see, the ear hear, but the brain fails to appreciate the beauty of the picture or the melody of the music! They are frequently depraved in habits, and negligent and untidy in dress. While the disease may be hopeless when the prospect of recovery is considered, much may be done by intelligent nursing and sympathetic companionship to improve the habits and disposition of such patients. Dotage is dementia, resulting from old age, and is a natural process. The mind, like the body, lives a certain time, and then the process of dissolution slowly supervenes, the mental faculties returning to childhood. The nursing of such cases is an excellent test of the resources and patience of the nurse. Good temper, patience, firmness, and tact are all necessary in a marked degree, for there is no disease so difficult to nurse as senile dementia.

(4) *General Paralysis of the Insane.*— This form of mental disease is peculiar as it embraces in its various stages or types the different forms of insanity already considered. The question is still an open one whether the organic disease of the brain found in such cases is the cause of the mental disturbance or its consequence, or whether the cause of the disease is to be searched for in some outside influence, moral or physical. The patient is excitable as a rule at the outset of the disease, impatient of control, and possessing the most exaggerated ideas of his own wealth, powers and abilities. After a time of excitement, lasting generally from a few weeks to a few months, he passes into a stage of quiescence or quietude, during which he becomes stout, stolid in expression, and his intellectual faculties are dulled or blunted. When questioned closely during this stage he still confesses to grandiose delusions. Later on he becomes demented—mind and body become complete wrecks; he is unsteady in his gait, staggers about like a drunken man, is very quarrelsome and irritable. He rapidly gets thinner and more feeble, then bedridden,

and, unless carefully nursed, bedsores form. He is at this stage in a hopeless and helpless condition, yet he is happy; so shaky are his hands that he is unable to hold a cup to his lips. He is yet the strongest man in the world; while in rags and extremely dirty every piece of paper represents to his distorted imagination a bank-note, and every piece of metal he picks up, such as buttons, &c., are sovereigns to him. Later on epileptiform seizures take place, and death draws a curtain over the unhappy scene. The disease is necessarily fatal, no remedy having been yet found for it, and its duration is from two to three years; rarely this period is prolonged, especially in women, for several years longer.

It is essentially a disease of adult life, and attacks its victims at a time when the brain should be in the full zenith of its power. While most frequently due to dissipated habits, it may be caused by mental worry, such as business anxieties, and it attacks men much more readily than women. Although the duration of the disease is really very short as a rule, still by good nursing, careful feeding, and a constant attention to cleanliness, the fatal termination may be delayed for some considerable time.

(5) *Insanity Associated with Epilepsy.*—Epilepsy is a disease to which many persons are subject who are yet not legally insane, but if the disease is of long duration the mind gradually gives way, and outbursts of maniacal disturbance take place. It is a fine legal question to decide where epileptic sanity ends and where epileptic insanity begins. The decision is generally made for us when the patient commits some outrageous act. It is well nigh impossible for any person subject to severe epileptic fits to possess a well-balanced mind. The terrible explosions that take place within the cortical cells, producing an ordinary fit, of necessity disarrange their usual functions, and the confusion of mind succeeding the seizure is undoubtedly due to temporary mental instability.

When well marked symptoms of insanity are found associated with epilepsy these symptoms take on definite types, Then we may have epileptic mania, epileptic melan-

cholia, epileptic dementia, when the mental faculties have been permanently injured and destroyed by epilepsy, and epileptic imbecility, when, during childhood, the growth of the mental faculties has been arrested by epilepsy.

The symptoms of a fit are familiar, but the mental characteristics of epileptic insanity depend upon the form of insanity seen in any given case, and the natural tendency of ordinary idiopathic epilepsy, where a cure is impossible, like other forms of acute mental disease, is towards dementia.

To a nurse whose ambition it is to undertake the care of the insane such a subject as their habits should receive attention. This, however, is well done in the third edition of "Handbook for Attendants on the Insane," published under the supervision of the Medico-Psychological Association, and the duties of a nurse who undertakes such work I endeavoured to describe in a lecture published in *The Hospital* of May and June, 1889.

In conclusion, I would impress upon all that nursing and caring for the insane is no mere child's play. Nurses must bring to the work all their energies, capabilities, patience, and tact.

It is a trying life, worrying in the extreme, and not entirely free from danger. The reward looked for is not praise of men, but the pleasure of seeing, in recovering patients, the gradual dawn of a new mental day, the awakening to life of a mind which, perhaps for months, has been clouded over, and, to all intents and purposes, dead.

Such an experience is a frequent one, and surely such studies are worthy the attention of the philosopher; at any rate, they are the reward for which medical superintendents, as well as nurses, are content to work.

THE END.