

Clinical Teaching in Malta Fifty Years Ago

A Personal View

DR. PAUL CASSAR MD BSc DPM FRHistS D Litt (Hon. Causa).

HON. FELLOW OF THE UNIVERSITY OF MALTA

I have ventured to write this brief memoir in response to requests from a number of medical students who are curious to know what type of clinical and hospital training my generation of medical men received during our student days fifty years ago (1937-40).

The general hospital of that time was the Central Hospital at Floriana now the Police Depot or Headquarters.

Diagnosis

Our training in clinical practice was based on accurate history taking and a thorough physical examination of the patient. The importance of semeiotics was drilled into our heads by such leading clinicians and experienced teachers as Professors Edgar Ferro, Peter Xuereb, Joseph Edward Debono and that daring surgeon Peter Paul Debono - a quartette of medical men who graced our profession and who are still affectionately and gratefully remembered by my generation.

Special emphasis was laid on the digital percussion of the chest for evidence of consolidation in the lungs, of the abdomen for patches of dullness in tone indicating underlying masses of fluid, and of the skillful use of the sphygmomanometer. We also had to be well versed in the use of our eyes, ears and sense of touch to detect the early signs of diseases while standing at the bedside of the patient.

As the electrocardiogram had not yet arrived on the scene, great importance was attached to the frequent use of the stethoscope. This instrument was no mere status symbol slung round our neck, but a real diagnostic tool. I vividly recall the occasional use of the monaural wooden stethoscope by Professor E. Ferro in cases where the heart sound listened to by the binaural one could not be clearly distinguished. That same monaural stethoscope has been my treasured possession for almost half-a-century having been passed on to me as a memento by Professor Ferro himself on his retirement from the Chair of Medicine in 1939.

We students had to be expert in recognizing the various murmurs of the heart and their meaning. Stress was also laid on the distinction among the different breath sounds - if need be by discarding the stethoscope and applying our ear directly to the patient's chest to detect the bubbling sounds of fluid in the lungs; to look for the presence of clubbing of the fingers; and to note the facial expression of the patient - the malar flush, the anxious look and the Hippocratic facies - and infer their respective significance. We learned how to feel the pulse to appreciate its multiple variations - feeble, thready, irregular, etc.

The main concern of the physician and surgeon was to reach a correct diagnosis to enable them to forecast the outcome of the illness since there was not much else one could do by way of treatment to alter the course of the disease owing to the therapeutic

impotence of medical science at the time. We were, therefore, expected to recognise whether the illness was of grave import or whether one could hopefully give the comforting assurance of an eventual recovery to the patient and his relatives.

Although the laboratory provided us with the results of the blood serum reaction to distinguish between typhoid and undulant fever, stress was laid on the clinical distinction between the two diseases in the very early stages of the illness. We were also kept on the alert not to miss a case of rheumatic fever with its consequent and dreaded endocarditis and valvular changes. The other disease that dominated the hospital scene and which called for careful clinical evaluation was tuberculosis of the lungs though radiology was here of great help. Pneumonia, though relatively easily diagnosed, was a bug bear as to its final outcome and we waited anxiously for the crisis to occur after one week - the turning point at which the fever would drop abruptly and the patient would take a sudden turn for the better - or else get worse and die.

The performance of a lumbar puncture in cases of suspected tubercular, and of the other types of meningitis, was an infrequent occurrence as it was well known that lumbar puncture was a very hazardous procedure if instead of an instance of meningitis the case turned out to be one of masked intracerebral mass lesion. On the rare occasions when lumbar puncture was resorted to it was quite an event. The most stalwart nurses were called to hold down the patient and prevent him from moving and struggling while the needle was being introduced into the spinal canal. We students gathered round the performer, with the rest of his nursing entourage, in an air of expectancy - almost awe - which turned to a sign of relief and triumph when the fluid finally began to drop into the test-tube.

The hey-day of hysterical manifestations had already passed by the mid-thirties but we students had a few occasions to witness the *scenario* of this syndrome among the patients of the Maternity and Gynaecological Wards. The drama would start all of a sudden and quite unexpectedly by screaming, weeping and flinging about of the limbs with, sometimes, apparent loss of consciousness. These episodes were brought to an end very strikingly by the Professor of Midwifery, Professor Joseph Ellul. He would go to the bedside, introduce his right hand under the bedsheets and push it in the direction of the lower abdomen of the agitated woman. Then would follow a pulling movement of his hand when, to our amazement, the hysterical attack would be brought under control with a quick recovery of consciousness and relaxation on the part of the patient. We students never got to know the nature of the manipulation employed by the professor. Indeed it was years after I qualified that I stumbled, quite accidentally, upon a

description of the manoeuvre so deftly applied by Professor Ellul. This happened in the early fifties when I was reading a biography of that pioneer neurologist Sir William Gowers (1845-1915). In 1881 Gowers referred to a device for cutting short a hysterical fit - namely, a vigorous tug at the public hair of the patient, a trick which Gowers had learned from an old country practitioner. Professor Ellul was evidently familiar with this manoeuvre - which he applied so successfully - but which he would not divulge to his students very likely out of his sensitiveness of feeling for the woman. (Macdonald Critchley, (1949), Sir William Gowers, London, p. 41).

The Sick

Most of the sick were from the countryside as the townspeople and the wealthy stayed at home when they were ill. They availed themselves of the services of the private medical practitioner who did not demur to go on housecalls on foot or in a cab (*karrozzin*). When the need arose a consultation would be held with one of the physicians or surgeons of the Central Hospital at the patient's residence.

The Central Hospital, in fact, still formed part of the Government Charitable Institutions which were meant primarily for the so called *paupers*; but even this class of patients tried to shy away from hospital as much as possible - an attitude that was deeply ingrained in the masses and in which we children were brought up by our parents. I recall, for instance, how in the mid-twenties I used to be threatened by members of my family of being sent to hospital if I got injured while indulging in rough play with my friends; how my grandmother would make the sign of the cross on seeing the *katalet*, conveying the sick to hospital, pass by our door and murmur a prayer to be delivered from such a journey. Even when motor ambulances replaced the *katalett* the prejudice and fear in which we had been raised changed very slowly; and for a very long time *il-furmarija*, as the Central Hospital was referred to, was regarded with a great deal of misgivings, if not suspicion, and as a place to be avoided for as long as possible. As a result of this attitude, medical students only saw the most severe cases at a very late stage of the illness so much so that quite a proportion of the sick were brought to hospital more dead than alive and beyond the reach of any form of treatment then available.

The idea of a separate ward - much less of a hospital - for sick children had not yet arisen so that accommodation for them consisted in setting aside a small number of beds in the women's wards. Paediatric treatment was the province of the physician in charge of the Female Division.

Surgery

In the Surgical Division there was not much that the student could do beyond taking histories - a rather boring task as most of the cases were a monotonous stream of diabetic gangrenes, osteomyelitis of the lower limbs and tuberculosis of the spine in young people.

As far as fractures were concerned, the student of the thirties was reminded of World War I by two methods of treatment that were in vogue during that conflict and that had been introduced in civilian practice after that war. These were the Carrel-Dakin treatment for grossly infected wounds and the Balkan Frame for the immobilisation of fractures of the femur. Both these forms of treatment were still employed at the Central Hospital in my student days. The Carrel-Dakin method consisted in the continuous irrigation of badly contaminated wounds to disinfect them by a watery mixture of chlorinated lime and bicarbonate of soda which formed a weak solution of hypochlorite of soda. The Balkan Frame consisted of a wooden horizontal beam over the bed supported at its ends by two vertical poles at the head and at the foot of the bed respectively. The patient was laid in bed on his back and his splinted leg was raised and suspended in the air by means of ropes attached to the horizontal beam. Continuous traction to the leg was applied from the patient's foot by means of a system of ropes, pulleys and weights.

The daily morning surgical round took place in an aroma of decaying tissues, the stench being somewhat relieved by the smell of eusol from the dressings and by the odour of carbolic acid with which the floors were liberally washed. Indeed the use of carbolic acid formed part of the daily ritual in the cleansing of floors in all the wards and even extending to the entrance hall of the hospital. Indeed the smell of carbolic acid greeted you at all times as soon as you stepped across the threshold of the hospital portal. It was known as *il-porfum* in popular parlance. The sick and the visitors resented it immensely as the smell clung to one's clothes and one's shoes for the whole day and one took it along wherever one went!

There was frequent attendance at the operating theatre but only an occasional watching of an autopsy in the case of an unexplained death. The *post-mortem* was held in a small, humid and dismal room further down the road from the hospital as one descended towards Sa Maison Garden. The cause of death was based mainly on findings of gross and naked eye pathology.

Nursing

The counterpart of the present Nursing Officer was the Ward Sister or *Capo Sala* who was a nun of the Order of the Sisters of Charity. She did not have the professional qualifications now possessed by a State Registered Nurse but her nursing knowledge and training - usually pursued in Italy - was adequate by the standards of fifty years ago.

The lay nurses, on the other hand, had very scanty formal training because their schooling was poor and nursing had not yet achieved the status of a profession. They were officially known as Hospital Attendants and correspond roughly to the Enrolled Nurse of the present time though they were less qualified than the latter. They were referred to as *infermieri* by the administrative staff but patients and their relatives called them *servjenti*.

A good nurse was one who followed the Sister's orders to the letter; who prepared the beds in a tidy manner for the morning visit by the Professor; and who caused no worries to the administration and no friction with the patients and colleagues. As bed rest followed by a prolonged convalescence formed the basis of treatment, many of the sick remained in hospital for a long time. This had the advantage of affording an opportunity to the nurses of getting to know each patient as an individual with his particular whims, fears and foibles, and his family background. Thanks to this familiarity the long-term patient did not feel ignored or unwanted; nor did he feel anxious that any untoward change in his illness would go unnoticed by the nurses.

The Medical Ward Round

Individual contact of the student with the professors was close and continuous so that we enjoyed the personal attention of our teachers and were afforded the opportunity of becoming acquainted with their whims and moods and thus learn how to rub them the right way with an eye to promote our future career after qualifying. Indeed it was the procedure that the first four students who qualified in the final examinations would be attached as assistants to the professorial staff for two years of hospital practice.

The medical ward round was a solemn occasion not without a certain degree of protocol. The professor led the way from bed to bed with the Sister, who was a nun of the Order of the Sisters of Charity, on his right hand side. She walked stately with head erect. In those days nuns wore a large starched veil that descended from the top of their head over the shoulders to almost the middle of the back so that when she happened to move about briskly along the

hospital corridors her stiff veil conjured up visions of a laten sail.

The professor and Sister were then followed by the senior ward nurse while the entourage of students brought up the rear. As the professor stopped by each patient's bed, this group would form a sort of compact semicircle round the bed - a grouping which to a historically minded student brought visions of the Cottonera lines of fortifications encircling the three cities of Senglea, Birgu and Bormla.

The senior nurse would at times draw close to the Sister and whisper a few words in her ear. The Sister, in turn, would convey the message to the professor in a low voice and in Italian so that the patient would not hear and understand what was being said. This secret communication would consist of information which was not considered to be prudent or advisable for the patient to know so as not to lower his morale.

All medical men, in those days, were well acquainted with the Italian language and literature as these were compulsory subjects of study in the first years of the university course. The Sisters, too, were equally conversant with Italian as most of them were Italians and some of the Maltese Sisters had received training in nursing in Italy. Indeed doctors addressed the Sister as *Sorella*, Nurses and other employees called her *Sor* (abbreviation of *soru* or *sorella*) - except when relations between her and the nurses were strained in which case the nurses would refer to her behind her back and in disparaging tones as *Dik tal-kappun* - an allusion to her stiff headgear already mentioned.

Medical Therapy

In the main medical treatment was conservative and relied mostly on good nursing care and ensuring that the patient was made as comfortable as possible. Many of the medicaments in common use were ineffective. Only a few drugs were really useful such as digitalis, morphine, strophantin, ephedrine and insulin. These were dangerous drugs in inexperienced hands - hence the emphasis laid by the Professor of Pharmacology on memorizing their doses and keeping a look out for possible signs of toxic effects. A very useful standby - almost a panacea - was the substance with the formidable formula of pyridine - Bi-carbonic acid diethyl amide i.e. *coramine* for short. There was practically no illness in which it was not indicated and administered for its stimulant action of the *vital centres* - from circulatory collapse in heart disease and infectious conditions to respiratory emergencies during anaesthesia to surgical shock and poisoning from food and hypnotics. In fact no patient in *extremis* failed to receive at least 1 cc of coramine before he closed his eyes in everlasting sleep.

The sulphonamides in the form of *Prontosil* (sulphanilimide) had just arrived on the scene. It was being tried (1935) with encouraging results in infections with haemolytic streptococci but did not come into general use until 1937. Sulphapyridine (M&B 693), active against the pneumococcus, appeared in 1938-1939 during my last years as undergraduate. Until these turning points, pharmacological therapy consisted mainly in the oral administration of plant extracts in the shape of tinctures and syrups i.e. *Tinctura Nucis Vomicae* to aid digestion; *Tinctura Digitalis* to increase the force of the ventricular contraction of the heart; and *Syrupus Sennae* as a purgative.

The age of antibiotics had yet to dawn: in fact the earliest use of *Penicillin* as therapy came, on a very small scale, during wartime in the summer of 1943 when the British Eighth Army fighting in Egypt had only enough *Penicillin* to treat fifteen men (Pringle, P. (1948) *The Romance of Medical Science*, London, p.234). In Malta this antibiotic was first administered to civilians on the 31st January 1945 by Professor P.P. Debono (Cassar, P. (1975) *Professor Peter Paul Debono - The Man and His Times*, The St. Luke's Hospital Gazette, Vol. X, p. 127-150).

Placebos were not wanting. They consisted of a teaspoonful of *Aqua fontis* or *Aqua aurantii floris* to be administered *pro re nata*. The former was simply a teaspoonful of tap water; and the latter, a dose of orange flower water. To achieve the intended suggestive therapeutic result, these placebos were prescribed verbally by the professor in their Latin names to sound impressive and, for added effect, in a ponderous tone of voice and loud enough to be heard by the patient who, in his unlimited trust in the professor's wisdom and in his ignorance of Latin and pharmacology found solace soon after the teaspoonful of the mysterious liquid was placed in his mouth.

Venesection from the cubital fossa was routine treatment for acute pulmonary oedema - and with quite rapid and effective relief for the patient. I recall the case of a middle-aged man from Floriana who used to call at the hospital whenever he felt an attack of pulmonary oedema coming on and ask to be bled - *ġejt biex ninfasad* he would say - to prevent the attack from reaching a distressful degree.

In feverish illnesses, cold compresses were applied to the forehead of the patient to lower the temperature when this ran high. Meningitis was treated by placing a rubber ice-bag on the scalp. Therapy for pneumonia consisted in the application of hot water bottles to the patient's back - with the danger of scalding him when he was almost comatose from the toxæmia - as sometimes happened, thus adding further complications to the lung condition.

Intramuscular injections were the domain of the Ward Sister: while the few intravenous ones were in the hands of the four Resident Medical Officers who would have qualified during the previous two years. If, as a student, you were in the good books of the Sister and clever enough to cajole her or one of the RMOs to allow you to give such injections under their supervision, you would get a chance of gaining some experience in this aspect of practice before you qualified.

Valedictory

Germany declared war on Great Britain on the 3rd September 1939 but it was not until the spring of the following year that the German army began to advance in earnest with the invasion of France and the hum of impending warfare in the Mediterranean. With the Maltese Islands alerted for hostilities from the Axis powers, we sat for our final examinations. The results were out on the 10th June 1940. The following day Italy entered the Second World War. Shortly before 7 a.m. of the 11th June, Malta found itself in the front line. I was instructed by the Chief Government Medical Officer to report for duty at the emergency hospital, set up in the School of St. Joseph at Pawla, for the reception of civilian casualties from the Dockyard and the Cottonera area. I went there early in the morning armed with a steel helmet to protect my head from shrapnel and with a yellow band tied round my right arm with the inscription in large black letters MEDICAL DOCTOR. This equipment was provided by the Medical and Health Department.

As soon as I arrived at the Pawla hospital, as a new, fully fledged doctor, I received my baptism of fire from the air bombardments by the first Italian sky raiders over Malta. My undergraduate days were over - for, overnight, I was called to put into practice what I had learned as a student and to initiate my medical career by ministering to the needs of the very first civilian casualties of the war.

Musings of a Veteran

There has been a drastic evolution in the training of medical students and in the hospital scene in Malta since my student days in the late thirties. The change is obvious not only in the structural appearance of the edifice of the modern hospital but also in the pattern of diseases and the means of treatment; so much so that today's medical student - remote from the practice of medicine which prevailed fifty years ago - may have read these pages with a tinge of incredulity.

Gone are the huge halls that served as wards at the Central Hospital with their endless rows of beds ranged along the high bare walls with sick men and women suffering from undulant fever (brucellosis) that dragged on for months on end; from typhoid fever, now a rare disease but which was then an almost seasonal certainty; and from pneumonia which often ended fatally within a short time.

Tuberculosis was not only a therapeutic problem but also a social one as there was as yet no specific chemotherapy for it and no supportive measures in the form of financial help for the sufferers and their families and no adequate housing accommodation.

Today's notions of autoimmune disease and of the genetic factor in the causation of ill health had not yet come within our ken though we heard, in a vague way, that *heredity*, *constitutional predisposition* and *local organ weakness* were somehow responsible for such illnesses as tuberculosis and diabetes.

Bacteriological investigations were available as were the Wassermann and Khan Reactions and the Lange's Colloidal test for syphilis but other technical diagnostic procedures, that have gone into the making of the modern doctor, were just not there - the ECG, EEG, ultrasound, arteriography, cytology, virology, blood transfusion, etc.

In the field of medical literature, the *British Medical Journal* was the only publication on which we students could lay our hands on to keep abreast of current medical ideas and progress. We occasionally heard of the *Lancet* and of the *Journal of Obstetrics and Gynaecology* but we never saw a copy of them at all. Today the medical student has at his easy availability well over one hundred journals at the Library of the Medical School dealing with every aspect of medicine and surgery and allied sciences. In our time there was not even a reading room at the Central Hospital - much less a Medical Library - and whenever we came up against divergent opinions about a case, the Court of Appeal we resorted to for a decision was William Osler's *Principles and Practices of Medicine* (13th Edition, New York, 1938) and the two volumes of Rose and Carles's *Manual of Surgery* (15th Edition, London, 1937).

In comparing the hospital training of the medical student of today with that of fifty years ago, one looks back upon it with mixed feelings. On the credit side of the balance sheet, one welcomes the efficient diagnostic means that have been devised during half-a-century and the benefits that patients derive from the therapeutic advances now at our disposal with lessening of much suffering and disability and with a marked prolongation of a useful life.

On the debit side one notices the tendency on the part of the medical student of today

(a) to make less use of the classical but still valid semeiotic means of inspection, palpation, percussion and auscultation in the examination of the patient and to rely heavily on the results of laboratory procedures in the diagnosis of disease rather than consider these results as confirmatory evidence of his own clinical findings by the bedside;

(b) to pin his faith on expensive drugs and forget that there are equally effective and well-tried ones at a lower cost; and

(c) to place his trust, in the case of the neuroses, on the blunderbuss effect of psychotropic drugs when all that may be needed is simply listening to the patient, understanding his worries, and supporting him psychologically to alleviate his anxieties.

What guidelines, for the medical student of our time, emerge from these contrasts? I would humbly submit these considerations. Do not shut yourself off, after you qualify, from current medical ideas on the assumption that the knowledge which you acquired as

a student was meant to serve you for the whole span of your professional life; on the contrary, remember that medical knowledge tends to become obsolete within a short time and that, therefore, you must be prepared to see the medical concepts of your student days shaken and superseded by the discovery of new facts and fresh investigations; and, finally, make sure to cultivate a cautious scepticism regarding the presentation of unfounded hypotheses and to refuse to accept blindly, as scientific dogmas, the innovations of your own time especially if propounded by the literature of drug firms. Above everything else use your own critical acumen so that you will not mistake mere change and idle speculation for real advances in the understanding of the aetiology of disease and the *raison d'être* of its treatment.

Editor's Note: I would like to congratulate Dr. Paul Cassar on this wonderful, outstanding, and impressive exposition of the contrasts between clinical teaching today with that of fifty years ago whilst emphasizing (a) the need to keep abreast with the rapid advances in medical and surgical knowledge; (b) the due credits to be given to the immortal clinical methods.