

## **In the beginning was Monsarrat – medicine in war-time Liverpool**

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Why am I here today? The short answer is that Nick Clitherow press-ganged me – getting his own back for the time when I was the boss and he was the registrar. The serious answer is because I am a relic. I was born in November 1923, 88 tomorrow, and I graduated in 1945. As a result, I saw a lot of what went on in hospital medicine during the War. Also my step-mother, Dr Hilda Cantrell, was in general practice in Wavertree, and so I also saw that side. When I was a student, the gynaecologists referred to pregnant ladies at term as “mature”, and if they had gone beyond their dates as “post-mature”. I belong firmly in the post-mature group – but even we sometimes come in useful such as occasions like this.

### *Monsarrat and hospital services*

Now I have entitled this talk “In the beginning was Monsarrat”. Two reasons – firstly it reflects the title of my presidential address to the Medical Institution in 1981 – “from San Domingo to Monserrat”. And secondly because war-time medicine in Liverpool and Monsarrat are indivisible. My man was Keith Monsarrat, born 1872, Surgeon at the Northern Hospital, who retired, as he had to, aged 60 in 1932. But in 1938 he was only 66, and was chosen to head the Emergency Medical Service – the EMS – in the event of war. He had been a territorial, had the territorial decoration and was both a good doctor and a good organiser – a rare combination – but one we shall see later.

A little more of his background. In 1915 my late mother-in-law was nursing in Blundellsands and his wife was her patient. They had lost a child about 1912 – disappeared whilst in the care of a nursemaid – either stolen or lost in Crosby quicksands. This scarred Monsarrat and he became rather reserved. He said to my mother-in-law “Nurse, if you have children never leave them in someone else’s care – look after them yourself”. Another sibling was, of course, Nicholas Monsarrat, author of “The Cruel Sea”.

As director of the EMS, Monsarrat had considerable power. Like the Centurion he could say “go - and he goeth”, or “come, and he cometh”. He could requisition beds in hospitals. He decided who would be called-up and who would be reserved. As an illustration of his powers, two short stories. My old boss, Ernest Rubin, was told by Monsarrat that he would be reserved in the event of the outbreak of war. As the only person I have heard of who got the better of Monsarrat he was able to reply “Sorry Sir, but I have joined the

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territorial army and will be called up". And he was, serving in Norway in 1940, West Africa in 1942, and on mainland Europe after D-day. To show the sort of problems that doctors experienced I will quote his words to me – "I was in a hospital in Antwerp when it was being bombarded by flying bombs. When you heard one coming whilst you were performing a barium meal, you would see the duodenal cap become totally spastic, and the stomach was tightly drawn up to the left. After the explosion the stomach would drop, the duodenal cap relax and you could proceed". Dr Rubin was the only man I know who could describe the influence of a V1 flying bomb on gastric motility.

The second story is the reverse. Robert Evans, later physician to the Stanley Hospital, was engaged to Mary Jordan, recently qualified. She was therefore liable to call-up, at Monsarrat's discretion. He said to Robert "If you bring the wedding forward then as a married woman she is not liable to call-up". So they married quickly - and of course Monsarrat had a doctor not liable to call-up whom he could call on for useful work.

Now let us consider hospital services in 1939. The acute service was provided firstly by the teaching hospitals – Royal 360 beds, Southern and Northern about 250 each, and the Stanley about 160 – a total of about 1000 beds. But the bigger total was provided by Walton 1200 beds, and Mill Road and Smithdown Road about 700 each – a total of 2600 beds. Chronic care was provided by Belmont Road at about 1000 beds, although some were acute beds for dermatology and venereology. Now if we look at the map of Liverpool, we see how close to the docks are the Southern and the Northern – a distance of 400 yards. Think of a bomber travelling at 180mph – it covers 400 yards in 5 seconds. Other places of note were The Royal Infirmary, Mill Road, Smithdown Road, and the Waterloo Tunnel from Edge Hill to Waterloo Dock, and lastly Huskisson Docks numbers one, two, and three. Monsarrat decided that the Southern and Northern must be evacuated. Where to?

How they did it I don't know but in a couple of weeks the Southern was relocated to Fazakerley where it took over wards from the Infectious Diseases Hospital. The Northern was not so fortunate. It took over St Katharine's Training College in Childwall, now part of Hope University. The Chapel became the male medical ward under Sister Hailey – 40-48 beds with two rows back to back in the middle. The female medical ward under Sister Soutter was in about five classrooms. How you kept a close eye on them I don't know – but she did and was so cheerful about it. I should mention that in early 1944 I was admitted to the male medical ward as a patient with pneumonia. On Sunday a church service was held around the patients and I treasure the moment when, at a pause in the sermon, one of the Old Boys in the ward said in a loud clear voice "He's wrong there, you know". The vicar ignored it! But this left the outpatients and minor casualty departments in the city, near the docks.

Now in addition it was thought that there would be heavy casualties from civilian bombing – however this did not start until August 1940. Nevertheless

Monsarrat made a policy decision to discharge half the TB patients from Highfield Sanatorium. This gave an EMS hospital of 200 beds. What happened to the TB patients? In those days, pre streptomycin, few patients recovered. By five years 50% were dead; 40% unable to work; and 10% were fit to work. So their discharge from hospital probably had little effect on the outcome – although those in contact at home were at greater risk.

### *Consequences of bombing*

Now what happened to our hospitals and their staffs during the bombing? Pictures of the city show the devastation of Lewis's and Central Station, Lord Street and Castle Street by the Victoria Monument. The two hospitals and their casualty departments near the docks were unaffected. But the docks did suffer severely, particularly in May 1941. Let us look at the three Huskisson docks. Huskisson number 2 dock contained a ship, the "Malakand", loaded with 5000 tons of ammunition. This was set on fire and exploded. A piece of the ship weighing a couple of tons was found in Stanley Park two miles away. The dock was so damaged that it was filled in and today's map only shows docks numbers one and three. The death toll was only in single figures, as everyone was evacuated.

At the other end of the scale was the Clint Road shelter disaster in November 1940. Mobile medical teams were made available and Dr Leonard Findlay, the medical superintendent of Mill Road, went to the scene with Sister Croll. They found 170 people trapped. They were being engulfed – by flames or scalding water, I know not which. Findlay crawled through the wreckage, shooting morphia into those trapped so that they did not know what was happening. That single incident is probably the second worst in the whole country, being exceeded only by an incident in Bethnal Green, London, in March 1943 when a stream of people leaving a tube shelter met head-on with incoming people after a second raid alert.

Mill Road Hospital was slightly damaged in December 1940, particularly the Nurses Home, but there was no loss of life. A bomb fell 400 yards from the evacuated Northern Hospital in Childwall and there was minor damage such as blown-in windows.

But in the May blitz of 1941 the hospitals luck ran out. The city was bombed on eight successive nights in an effort to destroy the port which handled nearly 50% of the imports. To immobilise a port there were three lines of attack. Firstly to mine the sea approaches – and there are close to 100 wrecks out to the Bar lightship. Secondly to bomb the docks as we have seen. And thirdly to attack the railways, as road transport was vastly less important than now. One example concerned an ammunition train at Clubmoor which is about two miles from Mill Road. This was set alight and exploded wagon by wagon – I awoke on the Sunday morning to the sound of yet one more wagon exploding.

Two railway men won the George Medal that night – they brought a locomotive from Edge Hill Shed (it happened to be a London express one – not a freight locomotive) and removed half the wagons, during the raid, before they went on fire.

All the hospitals escaped except one – Mill Road, which was perhaps the safest. Most of the hospital was destroyed and there was heavy loss of life. William Grey, a surgeon, was killed as he reached the hospital. The assistant matron was killed in the hospital. The matron was wounded and lost an eye. The maternity unit was hit and many mothers and babies killed. Two stories come to mind. My wife was a magistrate and one of her senior colleagues was a cheerful practical man who did tremendous youth work. Only at his death did she discover that his wife and only child were killed at Mill Road. He never re-married.

The second is a strange story. My stepmother performed child welfare clinics for the local authority as part of her general practice. One day a mother brought her child to be checked. She had been at Mill Road, crawled through the wreckage, found her child and another, gathered them up and walked home. Her child died and this was the other, which she was bringing up as her own. No one was interested – so she kept the child. What happened in the end, I do not know.

Now to the incident which was perhaps the strangest of all that night. There was an emergency reinforced theatre in the basement. It was hit and the roof collapsed. One of the medical staff, Reg Sluming, catapulted through saying, as he arrived, “My name is Sluming, may I introduce myself?” But what of the patient, for he was unconscious on the table, and what of the staff attending him? The surgeon was Digby Roberts, the anaesthetist Claude Watson (with whom I corresponded about ten years ago) and the theatre sister Glenys Pierce whom I knew very well at Broadgreen. She died in 1988.

Digby Roberts shouted “Duck under the table”. Watson did but felt a blow on his face – he eventually lost an eye. But he carried on with the anaesthetic – it was probably open ether and had been started by a medical student. The incision had been made – either for a perforated ulcer or an appendix. They kept the patient under anaesthetic – someone eventually relieved Watson. Somebody – probably Dr Findlay – arranged transfer of the patient to Walton and he was moved whilst the raid continued. And Walton finished the operation. The patient recovered and returned to Mill Road saying “Where are my boots?” And a young social worker, Ethel Griffin, had them in the undamaged out-patients. What happened to the patient? A few say he came back to a reunion – but most say he was lost at sea within the year.

What else can we say about this incident? Two nurses and two medical students were killed in the theatre. One student, Young, was the son of the colliery manager at Point of Ayr. The other was Morris Louis Peace Lyons. His elder brother, Raphael, was in practice in Earle Road, Wavertree. His

younger sister, Cecily, graduated in 1948. But note his first names included “Peace”. He was due to graduate in 1942 and must have been born very close to the Armistice in 1918 – the war to end all wars, only to be killed in the next.

At this point I want to talk about Leonard Findlay, the Medical Superintendent of Mill Road. He was born in 1905, educated at Liverpool Collegiate School – as were Ronnie Finn, Raymond Galloway, and myself. He graduated with honours in 1928, proceeded MD, and by 1935 was Medical Superintendent of Mill Road. He had to be a clinician (and he was a very good one) and administrator and organiser – and he excelled at this. He is, therefore, the second such person we meet, Monsarrat being the first. How we need such as them today. Fin could influence a committee and always, in any divergence of opinion, would know where the point of compromise must be. He would state; the argument would continue; but eventually they would come to the point of compromise he had stated half an hour before. His portrait was on the wall of the committee room where the Medical Board at Broadgreen met. I would always sit where I could see it – to encourage me. Many times I have silently pleaded to the photograph – Fin, come back and sort this lot out.

Why should we particularly remember him? Here is an extract from the *London Gazette* of September 1941. Please note the three dates – Clint Road and the two Mill Road bombings:

FINDLAY, <i>Dr. Leonard M.D.</i> <i>M.B., B.Ch.</i> <i>Medical Supt</i>	Mill Road Infirmary	Air raid- saving life	Mill Road Infirmary, Everton, Liverpool	22 Nov & 22 Dec '40, 3 & 4 May '41, 5 Sep '41 <i>p. 5140</i>
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Here is the full citation for the award of the George Medal:

**Leonard Findlay**, M.D., M.B., B.Ch., Medical Superintendent, Mill Road Infirmary, Liverpool

L.G. 5.9.1941 p. 5140

Dr Findlay displayed outstanding courage and devotion to duty when the Mill Road Infirmary was badly damaged during an air raid.

Although badly shaken and severely burned he immediately organised rescue work and personally led parties of volunteers to release persons trapped under the wreckage. He worked without ceasing throughout the night and following day and refused to have his own wounds treated until he had accounted for all his patients and staff.

Under his cool and courageous direction many lives were saved and all the patients evacuated to other hospitals.

It speaks for itself. Yet so few people seem to know about it – either then or now. But such incidents as this should be remembered. Obviously you will realise from what I have said that I held Leonard Findlay in exceptionally high

regard. The second worst time in my professional career was when I attended to him professionally in his declining years.

### *Broadgreen Hospital*

In the bombing of Mill Road, Liverpool had lost one fifth of its acute beds. What did Monsarrat decide, and how could he make up the loss? Once again he turned to Highfield Sanatorium. This time six of the remaining eight tuberculosis wards were emptied. This now gave a total of 350 acute beds. The nucleus of the staff from Mill Road, under Dr Findlay, was transferred to run the “new” hospital. The rapid building of ten hutted wards took place – each of 40 beds, giving a total of 750 beds. The name was changed to “Broadgreen Hospital” and of course still stands there today, although altered.

We should look at the situation more closely. Some of you will remember Broadgreen in the seventies and eighties. Where the maxillo-facial unit was in 1970 was in 1942 the total theatre block. The first improvement was a theatre built in 1948 in the side room of H1 for the Chest Unit. In 1953 a new two-theatre block was built. About the same time an orthopaedic theatre was built opposite L1 ward. And only then did the maxillo-facial unit occupy the old theatre site. But there were difficulties. The corridor to the hutted wards K1-O2 was open at the sides and there was no cover between that block and the main block. Patients for theatre, on rainy days, were covered by macintosh sheets. Only in 1963 was a link corridor built between the two blocks. And at that time, side walls were built on the K1-O2 corridor. The wards were heated by coke stoves till well after the War. These hutted wards were built with a ten year life – and lasted 59 years.

It is of interest to note that, at the time of the Korean War 1950-3, two more wards – X1 and X2 – were added and two other wards built at the same time were converted to a laboratory and to a physiotherapy department. All this grew from the devastation of Mill Road.

Now a little more about war-time Broadgreen. All hospitals were likely to have to set aside wards for military casualties, overseen by Monsarrat – and Broadgreen, ramshackle though it was, was no exception. At its peak three wards were devoted to military casualties in the period immediately after D-day. One was devoted to German prisoners of war, and there was one incident which should be remembered. One of the badly wounded was a Hitler Youth – probably aged 14 – and he was dying. All he wanted was his mother. The Night Superintendent, Marjorie Phillips, comforted him – and was criticised by a colleague. She gave them short shrift – she was the substitute mother. Her behaviour, to me, exemplified that when you treat casualties in war-time there is no “them and us”. All are patients.

Another ward – K1 – was an officers ward. One of the wounded was a Polish officer, and in another ward was a Polish other rank. Someone put them

together so that the other rank could speak to someone, as he spoke little English. A junior officer protested, but the senior officer-in-charge said “I am the senior officer. If I complain I expect you to take notice. I do not complain. Therefore ignore the junior officer”. This bore out my own experiences that the more senior the officer, the more sense one encountered.

From 1943 onwards Baker-Bates ran Sunday ward rounds from 9am to 3pm and I learned a tremendous amount of medicine there. “Go and examine that chest – or abdomen. Take that history”. This began my attachment to Broadgreen where I spent over 34 years of my post-graduate life.

One other load put on Broadgreen was the return of the Chest Unit on 1 November 1944. The two surgeons were Hugh Morrision-Davies, who had performed the first pneumonectomy for carcinoma in 1915; and Ronald Edwards, known to many of you – and described by an anaesthetist I met in Calgary in Canada as the best surgeon he had ever seen. But Broadgreen absorbed them, although of course it removed 100 acute beds.

### *Medical students in wartime*

And now to my student days. The blitz began a few weeks before I began medicine in September 1940. There were even a couple of daylight raids that month but then all was night raids. In March 1941, the night before I was due to take a professional exam, there was a heavy raid and a parachute bomb blew a hole in the engineering building from top to bottom. This damaged the lab where we were due to take a practical exam. The exam began an hour late in a different lab.

In May 1941, during the very heavy blitz, all work was suspended, and we helped where we could. I helped, uselessly, at a bomb damage site. Professor McCarthy, of microbiology fame, who was in the year ahead of me, helped at the temporary overflow mortuary in Galloway Street off Spofforth Road, Wavertree. As well as work, I was a member of the infantry training corps – voluntary in 1940-41 but compulsory thereafter. Later I transferred to the medical branch of the training corps and to enable us to gain further experience we helped to unload a hospital ship at Pier Head. You may not realise that until 1975 there was a full three platform station at Pier Head to enable boat trains to bring passengers direct to the ship. The train branched off at Edge Hill, took to the Waterloo Tunnel I mentioned earlier, crossed the dock road (where a man waved a red flag to stop the traffic) and then crossed a bridge to the station. The ambulance train was of course in the station so there was only a short journey from ship to train. The hospital ship was the “Newfoundland”, a Furness Withy ship of about 7000 tons which plied between Liverpool and Canada before the War.

What happened to her? A picture shows her leaving Algiers, possibly on her last voyage. In September 1943 she was sent to Salerno where there was

fierce fighting following a landing there to support the other landing in the toe of Italy. Two hospital ships took 103 American nurses to Salerno and they were attacked twice that day in spite of clear Red Cross markings. So Newfoundland and her partner were moved 40 miles off shore that night. Just after dawn they were attacked and a radio-controlled guided bomb hit the Newfoundland. This set it on fire, but all the fire-fighting equipment was destroyed. There were only two patients on board – they had expected to go back in during day light and pick up casualties. Six nurses and all the medical staff were killed and the ship sank. A sad end to the ship I had helped unload three months previously.

Next year came D-day and we clinical students were scattered. A couple managed to get themselves on an ambulance train. No such luck for me. I and a colleague, David Binns, were dispatched to Belmont Road where 100 lightly wounded were put in the physiotherapy department. We had practically no qualified supervision – about one visit a week. We looked after the wounds, removed shell fragments and tried to repair the psychological damage.

This brings me to the subject of what students did during the War. Remember – only half the house officer posts were filled by graduates – and registrars were very few. The other half had to be covered by students and it was a condition of our reservation from military service that we did at least three months such work – I did five months. I was at the Southern Hospital casualty department – at least with a qualified doctor – the young Professor McCarthy. But he went off ill and I was on my own – “You can manage, can’t you?” said the R.S.O. This involved a lot of minor surgery – opening abscesses, setting Colles fractures, etc. These were performed under gas and oxygen anaesthesia. I would start the anaesthetic, hand over to the Staff Nurse, do the job and then go back and finish the anaesthetic. Usually there was no qualified doctor in the building. In retrospect my blood runs cold.

Clinical years had four terms, thus we graduated six months early. Add on our student house jobs and we lost nine months of the course at least. I am sure the pre-clinical years could also have taught a vacation term but I have reason to believe they were unwilling. What the anatomy professor did, perhaps as a warning, was to fail a quarter of my year even after the re-take of second MB. We dropped from 84 to 63.

### *War-time general practice*

Now I turn to general practice, which I had been able to observe from 1935 when I acquired a step-mother, Dr Hilda Cantrell. In those days, general practice was very much an individual affair – either single-handed as my step-mother was – or perhaps with a partner – a cottage industry. But even before the War the practices near my step-mother had been forced into a loose union. Six in a group covered weekends from Saturday midday to Monday morning. Then holiday cover was added. During the War, however, I well remember that



part of the holiday was spent making out the bills to those who did not pay cash. There was no time during the year to perform that task.

My step-mother's practice was in Salisbury Road, Wavertree, and on the night of the Clint Road disaster a landmine landed in the nearby gas works, causing the biggest gas flame you are likely to see. This smashed the front windows and took the tiles off the roof. Another one landed 200 yards on the other side, took out the back windows and took the remaining tiles off the back. Tarpaulins were put on the roof but the upstairs was uninhabitable. The downstairs remained in use as a surgery. I gave up my bed to her mother and sister, and slept on the floor for eight months. This surgery was the only one in the group to be damaged.

My step-mother encountered another hazard. She drove into the garage at a local authority clinic she performed, and the weak head-lamp beam lit up a small bomb. So she drove out again.

The restricted head lamp beam and no street lighting made driving difficult and there was always night work to be done in winter, particularly as she performed a lot of obstetrics. But she did decline to do one visit, during a raid. The patient complained of diarrhoea.

I well remember the first night I drove a car – 3 November 1940. My father let me drive as we had to take a swab, probably query diphtheria, to the Public Health Laboratory in Mount Pleasant. I was terrified – of the driving, not the possible raid. So my driving licence completes 71 years tonight.

There was no penicillin then. Sulphonamides came in in 1935 and were developed from the original sulphanilamide to sulphapyridine, sulphathiazole, sulphasuxidine, etc. Sexually transmitted disease in wartime is always on the increase. Rubber gloves were scarce and one midwife I knew developed a primary chancre on the hand after delivery of an infected woman. She was, eventually, successfully treated with arsenicals.

Another experience after D-day was unloading an ambulance train at Broadgreen station. We were told to report at 8pm. The train arrived at 2am when we had dozed off. For 20 minutes there was hectic activity, supervised by Monsarrat. Broadgreen was a four platform station then, but fortunately the train came in to the platform nearest the road. Stretchers were unloaded on to old single deck Corporation buses, suitably adapted. Walking cases were put on ordinary buses and all the casualties were distributed around the local hospitals. Then we all went home.

### *War-time medical progress in Merseyside*

Some significant medical progress was made on Merseyside during the War. Firstly penicillin was manufactured here at Speke in the factory run by Distillers Company, as a result of their expertise in fermentation. Next I well remember a lecture given to my year by Dr Lourie of the School of Tropical Medicine.

They had been given some of the rare penicillin for research purposes and he told us rather excitedly that they thought it would cure syphilis. As syphilis could damage an army that was excellent news – and drug resistance has still not developed.

The third incident I wish to record is the first use of curare on 18 November 1944 by the anaesthetist John Halton at the Thoracic Surgical Centre at Broadgreen. The first patients were two German prisoners of war who required decortication of the lung for chronic empyaema. Halton was not convinced – the extract was rather impure – but he persevered and in early 1945 was joined by Cecil Gray and together they pioneered the Liverpool Method. I shall never forget John Halton coming into the mess at Broadgreen in 1946 when called in for an emergency – a patient in an iron lung needed an anaesthetic. He described how he and Cecil Gray had injected each other with curare. He said, with feeling, “If you ever wish to do your worst enemy a bad turn then give him curare without the pentothal. To be completely paralysed and still to hear and see is dreadful”. That was truly dedication to research.

### *Conclusion*

Now I am nearly at the end. As I look back, what sticks in my mind? Firstly, the willingness to carry on. Secondly, the bravery – remember Dr Findlay’s George Medal. Next, how much responsibility we had to carry as students. And lastly to give thanks that only 4000 were killed here in the blitz. If the Germans had fire-bombed the city on the fifth night in May 1941, the water supply was so bad we would have had a fire-storm to rival that at Hamburg in 1943 when 55000 died. But we did not and Liverpool survived to rebuild.

Afterthought: As a student House Officer I was paid at the rate of £50 per annum - £4.16 per month, plus board and lodging. This may appear very little, but as a House Officer, qualified, at the United Hospital, the pay was only £70 per annum!

### **Acknowledgement**

Thanks to Sue Pritchard for typing the article from the handwritten lecture.