Interview with Professor Wagih El-Masri, March 2011

I first came to Stoke Mandeville in 1971, a young graduate from Cairo Medical School. I had heard a great deal about Sir Ludwig Guttmann's pioneering work with spinal injuries and I came specifically to find out whether his approaches were credible. Back in Cairo in the late 1960s no one knew how to treat such patients, yet there were these rumours about this extraordinary man at Stoke Mandeville Hospital who not only enabled tetraplegic and paraplegic patients to survive their acute episodes but who was also able to get even the most paralysed of patients into the standing position and who would even get such patients back into work and with a decent quality of life. Back in Cairo no one could believe that, so I decided I had to come and see for myself. He used to say 'you succeeded in managing patients adequately when they became taxpayers again', where previously such patients would have just died he was getting them back to work.

Initially I was intending just to stop off for a few months before going on to train in the United States, I arrived in October 1971, very young, with no track record yet. I had heard that Guttmann was a very fierce person. When we first met he certainly wasn't very friendly but at the same time he was very courteous and welcoming. And he ended up persuading me to give up my US surgical training contract and to stay in the UK; I remained at Stoke for the next two and a half years. He had officially retired in 1967 but he was still very keen to teach staff and for me personally it was very inspiring to have been the very last student to be taught by him and to be, metaphorically, 'kicked in the backside'. He made me want to stay in a very demanding and exacting field of medicine

Guttmann was very clear in his own mind that because of the complexity of spinal injuries and the multiple ways in which they affected patients and because of the need for simultaneous, adequate management of both the medical and the non-medical effects, then the only appropriate system of service provision for patients was in specialist centres that could provide a team with the knowledge and skills specific for each patient. This enables specialists within such centres to have the ability to understand each other's professional language and capabilities. In my opinion that core presumption is still correct today, forty years on and has not been challenged by evidence of added value when delivery of care is fragmented.

One argument for the specialist centre model is statistical. In the UK there are only 10-15 spinal cord injuries per 1 million of population per year (considerably less than in the US or the Middle East); extrapolated across the UK that meant that the average district general hospital serving a population of quarter of a million might expect no more than two or three patients a year. So, considering the different types of spinal cord injuries it was just not going to be possible for each of these local hospitals to cater for the very wide-ranging injuries and effects for such a small number of patients or indeed to develop any expertise in their care.

The other argument Guttmann put forward was one of humanity of care. A spinal injury is a very frightening condition; it becomes even more frightening if you are the only patient in a hospital with that condition. Whereas at specialist spinal injuries centres everyone is in the same boat psychologically and can learn from and derive comfort and knowledge from the experiences of patients with similar problems.

His philosophy of dedicated management of spinal injury patients from injury to the grave is still credible today and has whenever possible been adopted around the world, albeit that the system of

health care provision in other countries is different. In the UK we certainly had and probably still have the best provision in the world for spinal injury patients. There are now other regional spinal injuries centres around the UK because of Guttmann, including the Midlands centre where I now work. Guttmann made Stoke Mandeville into a successful model for others to copy.

He demonstrated that the problem was not just that of the damage or injury to the spinal cord or vertebrae but that this initial injury went on to create a multi-system physiological impairment and malfunction causing a wide range of disabilities and being a potential source of many complications. In the early days of treatment these include bed sores and genito-urinary infections, muscle contractures, excess spasticity, deep vein thrombosis, stress ulcers and very many others.

He further demonstrated that almost all of these conditions are preventable or their effects can be minimised. Among the techniques that that he established arguably the most important was his multi-disciplinary approach that recognised that a combination of all disciplines – medical, nursing, physiotherapy, occupational therapy, social work - was needed to simultaneously address a patient’s needs. Further he promoted the idea that the physician treating the patient should (apart from the most specialised of treatments) be capable of covering both the medical and the surgical aspects of the patient’s treatment. Such a holistic merger of medical and surgical disciplines had rarely been practised before.

Guttmann used all the knowledge available at the time, added to it and integrated this knowledge with skills and experience into a model of service provision that ensures a humane cost effective treatment with quality outcomes.