

Dr Patricia R McElhatton 1948-2011

Dr Patricia McElhatton, the former Head of the UK National Teratology Information Service, based at the Regional Drug and Therapeutics Centre, Newcastle upon Tyne, passed away on Saturday 16 July 2011 after a long illness with cancer and cardiac failure.

Pat started her career as a young research technician in 1970 working with Frank Sullivan in the Department of Pharmacology at Guy's Hospital Medical School, University of London on the mechanisms by which drugs could produce congenital malformations in animals. Interest had been aroused by the suggestion of Meadow that antiepileptic drugs might cause malformations in children of mothers exposed during pregnancy and one of Pat's first research projects had been to investigate the teratogenic effects of antiepileptic drugs in pregnant mice. This led to a comparative study in mice of the teratogenic effects of the commonly used antiepileptic drugs used at that time, and the work was the subject of her PhD degree awarded by the University of London in 1976. She worked on a variety of teratogenicity projects over the next 10 years, ranging from the effects of stress, to mode of action of caffeine as an animal teratogen.



In 1983, as the result of a motor car accident, Pat suffered damage to her wrist which made it difficult to perform small animal experiments. Fortunately, this coincided with an increasing collaboration between the teratologists in the Pharmacology Department at Guy's and the National Poisons Information Service at Guy's, headed at that time by Dr Glyn Volans, who sought advice from Pat concerning effects of chemical exposures in pregnant women. Thus, Pat's research switched from animal studies to advising on, and following up enquiries to the Poison's Service regarding accidental and deliberate over-exposure to drugs and other chemicals in pregnancy. There was very little information on this topic at that time, and so it was decided that it would make an interesting research project to follow-up all enquiries regarding exposures in pregnant women and to develop a database of such outcomes. This led to the setting up of a Teratology Information Service in the Pharmacology Department, one of the first such services anywhere. One of the commonest drugs used in suicide attempts by pregnant women at that time was paracetamol, and all such enquiries to the Poison's Service were followed-up to determine the outcomes so far as the baby was concerned. Within a few years this led to the publication on the outcome of over 300 such cases of paracetamol overdose. A wide variety of other deliberate drug overdose cases in pregnant women were also followed-up which in general showed that it was very important not to withhold treatment from the mother because of the pregnancy, and if the mother survived, the outcome for the baby was usually satisfactory.

During these years while working in London, another of Pat's great interests was in the Samaritan service assisting in the counselling of potential suicide cases. She started as a volunteer in 1975 in the New Cross area of London, and quickly rose within the service to become Director for Greater London, with responsibility for 26 Samaritan branches from 1987-1991. She then continued as a volunteer until 1995 when she moved to Newcastle.

When Frank Sullivan retired from Guy's in 1995, the importance of the Teratology Information Service was recognised by the Department of Health, and following negotiation with Nick Bateman, who Pat had met in Guy's in 1970, the Department agreed to transfer the Service, under Pat's leadership to the Northern & Yorkshire Regional Drug & Therapeutics Centre and its associated Poisons Information Service in Newcastle upon Tyne. This also allowed Pat to move closer to her family in Middlesbrough. Pat continued to run the service, which had become the National Teratology Information Service (NTIS) in Newcastle until ill health forced her retirement in 2008. During that time she and her colleagues collaborated with many research groups, both in the UK and in Europe, in particular with the European Network of Teratology Information Services (ENTIS) to increase knowledge about the effects of drug and chemical exposures during pregnancy. This led to the development of appropriate treatment of such patients, as well as to knowledge about the risk of congenital malformations and the risks of abnormal postnatal behavioural and cognitive development of the babies. Pat also served on many UK Committees as a teratology expert, including the Advisory Committee on Pesticides and the Advisory Group on Chemical Contamination Incidents. She was the author, or co-author of over 100 papers and book chapters.

Pat's lifetime contribution to our understanding of the fetal effects of drug and chemical exposures during human pregnancy has been substantial. Her legacy lives on through the UK Teratology Information Service (www.UKTIS.org) which has successfully followed up many thousands of pregnancies where there have been exposures. This evolving dataset continues to provide invaluable information on pregnancy and fetal outcome to help inform appropriate prescribing during pregnancy and optimal management of women after exposures have occurred.

Pat is survived by her sister Kathleen Snowden, her brother-in-law Philip and their children.