

Research in General Practice

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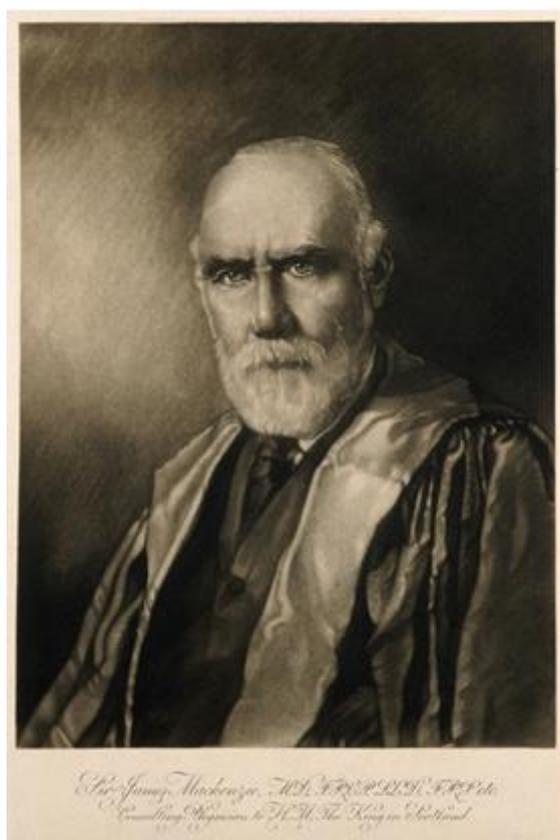
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This month Research Delivery Officer Emma looks back at Dr James MacKenzie, Dr William Pickles and the history of research in general practice. If you need any advice about the delivery of research across general practice in West Yorkshire then please get in touch with [a member of our team](#).

Primary Care research has long been established in the UK and is continuing to thrive year on year. Last year over one million people were recorded to have actively participated in research studies in primary care looking at healthier lifestyle, disease diagnosis and prevention (NIHR, 2017). But who were the key players in research and general practice?

Looking into the history of research in general practice it is clear from the literature that there are some key GPs who are repeatedly named as individuals who were pioneers in this field, and subsequently went on to make key medical discoveries through their research. In this blog I will look back on the life of two of these GPs.

The first GP is **James MacKenzie (1853-1925)** who is often cited as the father of general practice-based research (MacNaughton, 2002). McKenzie was born in Scotland and studied medicine at the University of Edinburgh before embarking on his career as a GP in Burnley in 1879.



Portrait of Sir James MacKenzie. The Wellcome Collection

(<https://wellcomecollection.org/works/w65r5ty8?page=2&query=jAMES%20mCKENZIE>)

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During his time in Burnley he realised there was a lack of evidence relating to early symptoms and signs of disease, and in order to increase his knowledge he began to undertake research. At the time a number of patients were presenting at the practice with various heart conditions; this subsequently influenced McKenzie's area of research into heart disease. Through his research he was able to develop the ink polygraph and make the discovery of extra systoles. During his time working as a GP in Burnley he published 36 papers on cardiological topics and published three books, the first being *The Study of the Pulse* in 1902 (Tuxford and Elwood, 1984). In 1907, he moved away from general practice and moved to London where he took up a role as a lecturer in cardiac research at the London Hospital.



MacKenzie's Ink Polygraph, by S. Shaw 1905-1915, The Wellcome Collection

(<https://wellcomecollection.org/works/ehmrsh29?query=+mCKENZIE+ink+polygraph>)

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Another influence MacKenzie made to the field of primary care research occurred in 1919 when he returned to Scotland and established the Institute for Clinical Research at St Andrews. The aims of the institute were to create a platform for GPs to study disease, record cases, and provide opportunities for training in the methods of clinical research. MacKenzie died in 1925 and the Institute closed a number of years later in 1944. Despite the closure of the institute MacKenzie highlighted the importance of research in general practice and the need for research training. The next GP I want to mention is William Pickles (1885 – 1969), a Yorkshire GP who worked in Wensleydale. Following in his father's footsteps Pickles studied medicine at the Yorkshire College and in the early twentieth century he took up a number of roles as a GP locum. In 1913, he joined a practice in Aysgarth in Wensleydale but with the onset of World War I he joined the Royal Navy and returned to general practice in 1917.

It was in 1926 when Pemberton (1969) notes that Pickles was influenced by the works of James McKenzie after reading his book 'The Principles of Diagnosis and Treatment in Heart Affections'. A couple of years following this there was an outbreak of catarrhal jaundice in the Dale. From a

population of just over 5000 there were 250 cases of jaundice recorded. At this time little was known about the disease. Pickles made a number of detailed accounts of the cases that he and his fellow GP partner Dean Dunbar had seen. It was from these accounts that Pickles was able to trace the source and determine the incubation period of the disease. The findings from this were later published in the British Medical Journal in 1930. Pickles had a strong interest in epidemiology in rural areas and subsequently he published on the outbreak of Sonne dysentery and of Bornholm disease.

In the mid-1930s Pickles delivered a presentation about his work to the Royal Society of Medicine and Major Greenwood (an epidemiologist) suggested he should write a book on his work and that he did. In 1939 the 'Epidemiology in Country Practice' was published. This book covered the life of a country doctor and descriptions of various diseases including influenza, measles and scarlet fever. Following the publication of this book Pickles received a number of awards and honours including one from the British Medical Association in relation to his research into epidemiology. Pickles was soon gaining a reputation as one of the leading epidemiologists in the UK and his advice was often sought after.



In 1952 the Royal College of General Practitioners was established and Pickles was invited to become the college's first president, a role which he gladly accepted. The RCGP was set up as unlike many other medical professions who had their own colleges for providing support in good practice, education and research, general practitioners lacked such professional bodies. In the early years the RCGP published a [Research Newsletter](#) which subsequently became the Journal of the College of General Practitioners.

Both MacKenzie and Pickles are commemorated each year by the RCGP. When the college was first established lectureships and awards were created for outstanding achievement. The first lectureship was named after James MacKenzie in 1954 and this was delivered by William Pickles. Today, the James MacKenzie lecture is related to an aspect of clinical medicine and takes place at the AGM. The second lectureship was named after William Pickles in 1968 and today the lecture is usually on a topic related to education held in the spring of each year.

Whilst I have briefly brought to your attention two GPs who made huge achievements in primary care research there are many others. If you have time take a look at these other pioneering GPs: [William Withering \(1741-1799\)](#), [Edward Jenner \(1749-1823\)](#), [William Budd \(1811-1880\)](#), [John Hunt \(1905 – 1987\)](#), [Edgar Hope Simpson \(1908-2003\)](#) and [John Fry \(1922-1994\)](#).

References

The Academy of Medical Sciences (2009) *Research in general practice: bringing innovation into patient care* [online]. [Viewed 2nd March 2018]. Available from: <https://acmedsci.ac.uk/file-download/35182-12569153801.pdf>

Elwood, J.W., and Tuxford., A.F (ed) (1984) *Some Manchester doctors: a biographical collection to mark the 150th anniversary of the Manchester Medical Society*. Manchester University Press, Manchester.

MacNaughton,J., (2002) *The St Andrews Institute for clinical research: an early experiment in collaboration*. *Medical History* [online] 46(4), 549-568. [Viewed 2nd March 2018]. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1044564/?page=20>

NIHR (2017) *One million people have taken part in primary care clinical research* [online]. [Viewed 6th March 2018]. Available from: <https://www.nihr.ac.uk/news/one-million-people-have-taken-part-in-primary-care-clinical-research/5431>

Pemberton, J., (1969) *William Pickles, address, Memorial Service presented at St Emmanuel Church, Leeds, 23rd April 1989* [online]. [Viewed 2nd March 2018]. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2236890/pdf/jroyalcgprac00362-0013.pdf>

RCGP, *Our History* [online]. [Viewed 8th March 2018]. Available from: <http://www.rcgp.org.uk/about-us/the-college/who-we-are/history-heritage-and-archive.aspx>