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Yvette Fay Francis-McBarnette

Pioneering sickle cell anaemia clinician who advocated for patients with the disease. Born on May 10, 1926, in Kingston, Jamaica, she died on March 28, 2016, in Alexandria, VA, USA, aged 89 years.

Yvette Fay Francis-McBarnette saw her first patients with sickle cell anaemia as a paediatrics resident at Michael Reese Hospital in Chicago, IL, USA, during the 1950s. Racial tensions were high in the USA as the young black doctor treated patients with the genetic blood disorder. Her time at the hospital, which served a growing black population in the city, shaped her lifelong commitment to screening and treating patients with the disease. "Dr Francis was a pioneer for the nation's identification and advancement of the public health, treatment, and need for research in sickle cell disease", says Lanetta Bronte, President of the Foundation for Sickle Cell Disease Research and an associate professor at the University of Miami Miller School of Medicine.

Francis-McBarnette set up a private paediatric practice in New York and began actively screening infants for sickle cell anaemia. "She created a paradigm shift in the management of sickle cell disease in the USA. She recognised that children were dying from an infectious aetiology and therefore implemented prophylactic antibiotic treatment. This was done prior to the NIH PROPS I randomised control clinical trial", says Bronte. The effectiveness of penicillin in reducing the incidence of pneumonia in children with sickle cell anaemia was reported in *The New England Journal of Medicine* in 1986—15 years after Francis-McBarnette began prescribing them to patients.

Awareness of sickle cell anaemia grew during the Nixon administration, which dedicated funds to education and research about the disease. But states began passing laws mandating black people be screened for sickle cell anaemia, sparking a backlash in the community, which was still reeling from the US Public Health Service Syphilis Study at Tuskegee and feared discrimination on the basis of genetics. President Richard Nixon asked Francis-McBarnette to join an advisory committee on sickle cell anaemia that helped to formulate the 1972 National Sickle Cell Anemia Control Act that directed federal funds for voluntary screening and counselling programmes, education, and research. "Her work created the legislative roadmap for the 1972 Sickle Cell Control Act with a focus on screening, education, and research. Patients under her care lived well beyond the projected lifespan of adolescence. She recognised then, challenges in finding adult providers, which has reached alarming rates today along with premature mortality in the adult sickle cell population", says Bronte.

Throughout her career, Francis-McBarnette advocated for the education of medical personnel, teachers, psychologists, and the population at large about the disease and called for more government support of research and education efforts. She also asked historically black colleges and universities to help this effort: "Black colleges should take a leadership role in the development of such scientific research programs and in the development of appropriate institutional structures", she wrote in the *Journal of the National Medical Association* in 1972.

Francis-McBarnette grew up in Harlem, New York, and began attending Hunter College when she was 14 years old. She graduated with a degree in physics, received a master's degree in chemistry from Columbia University, and enrolled at the Yale School of Medicine in 1946. She was just 19 and the second black woman to attend the school. She completed her paediatrics residency at Michael Reese Hospital in Chicago then returned to New York to practise medicine at Bellevue Hospital. In 1966, she, Doris Wethers, and Lila Fenwick founded the Foundation for Research and Education in Sickle Cell Disease. She established the sickle cell clinic at Jamaica Hospital Medical Center in Queens and ran the St Albans Family Medical Center. In 1978, she went back to school to complete a residency in internal medicine and a fellowship in haematology at Bronx-Lebanon Hospital Center so that she could work with patients who she initially met as children in the clinic. Francis-McBarnette is survived by her husband, Olvin R McBarnette; six children; three grandchildren; and her brother Mac Francis.

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