Profiles in Cardiology

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Desmond Gareth Julian: Pioneer in Coronary Care

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Desmond Julian (Fig. 1) is an admired leader in European cardiology, whose many accomplishments include the introduction of the concept of coronary care, the publication of many articles and textbooks, and an important influence on the practice of modern cardiology. Born in Liverpool, England, in 1926, he graduated with honors from St. John's College, Cambridge, in 1946, and the Middlesex Hospital Medical School in London in 1948. After house officer positions in Liverpool and the Central Middlesex Hospital, and a registrar position at the National Heart Hospital in London, he was a research fellow in Boston at the Peter Bent Brigham Hospital from 1957 to 1958, returning to the Royal Infirmary, Edinburgh, as a senior registrar from 1958 to 1961.¹ He considers his early influences to include his father, who was an internist, Evan Bedford, Paul Wood, and Sidney Burwell. He obtained the M.R.C.P. (London) in 1952, the M.A. in 1953, the M.D. in 1954, and was elected F.R.C.P. in 1970.

At the Royal Infirmary, Edinburgh, in 1959, Julian administered open chest cardiac massage on several patients with myocardial infarction who had suffered a cardiac arrest. This dramatic experience led to a lasting research interest in coronary disease and sudden coronary death. From a patient who was successfully resuscitated, he learned about the work of Kouwenhoven at Johns Hopkins, who proposed closed chest massage in 1960. It seemed logical to Julian that patients at risk for arrest should be grouped together in a monitored area so that rescue resuscitation could be instituted immediately. This pioneering approach, published in *Lancet* in 1961, after an earlier rejection by the *British Medical Journal*, included the comment:

All wards admitting patients with acute myocardial infarction should have a system capable of sounding an alarm at the onset of an important rhythm change and of recording the rhythm automatically on an ECG. . . the provision of the appropriate apparatus would not be prohibitively expensive if these patients were admitted to special intensive-care units. Such units should be staffed by suitably experienced people throughout the 24 hours.²

Julian's article was the first to advocate a specialized coronary care unit. In 1962, after moving to Sydney, he initiated a coronary care unit. About the same time, similar units were also started in Kansas City, Philadelphia, and Toronto.³

Because no consultant vacancies were available at desirable institutions in the U.K., Julian moved to Australia in 1961 to become staff cardiologist at Sydney Hospital. There he organized a cardiac catheterization laboratory, continued his research into the monitoring and treatment of acute myocardial infarction, and traveled widely to report his results. He returned to Edinburgh in 1964 as a consultant cardiologist at the Royal Infirmary, where his research focused on reducing the time lag between the onset of symptoms and admission, the use of antiarrhythmic drugs to prevent sudden death, and a mobile coronary care concept. He and Michael Oliver organized the first international conference on coronary care in 1967.

In 1969, Julian became an adviser on coronary care to the World Health Organization (WHO), later serving as a consultant to the WHO from 1980 to 1999. His growing reputation led to an appointment from 1975 to 1986 as the British Heart Foundation Professor of Cardiology at the University of Newcastle-upon-Tyne, where he developed a cardiac center of importance. Along the way, he was a mentor to Valentin Fuster, Ronnie Campbell, and others who would become leading figures in cardiology. His trainees especially valued his careful approach to the examination of the patient, his common sense and judgment, his admonition to avoid dogmatism and arrogance, and his love of clinical cardiology. In 1986, Julian left active involvement with clinical medicine to become the medical director of the British Heart Foundation (1986–1993). In that important post, he was influential in raising funds and developing research and community programs throughout

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FIG. 1 Desmond Gareth Julian

Britain. In addition, he accepted organizational responsibilities as President of the British Cardiac Society (1985–1987) and Second Vice-President of the Royal College of Physicians (London) (1991–1992). He was also Chairman of the British Action on Smoking and Health (1993–1996) and the National Heart Forum (1993–1999).

While he was at Edinburgh, his colleague Michael Oliver introduced him to the new concept of multicenter randomized clinical trials. From this stimulating experience, Julian learned about the power of large clinical studies in deciding the value of a cardiac therapy. This led to an increasing involvement in many large clinical trials, including the ISIS (International Study of Infarct Survival) trial, an acronym which he coined. His great experience, keen intelligence, and understanding of the complexities of these trials made him a leading international expert in this area and has kept him extraordinarily busy after a so-called retirement. He has now participated in more than 40 studies, often chairing the Data and Safety Monitoring Board. He also initiated an invaluable Clinical Trials website (<http://www.cardiosource.com>) to maintain a comprehensive listing and update of trials and abstracts of presented papers. Currently, Julian continues to lecture around the world and to write about well-conducted clinical trials which, he contends, should form the basis for our clinical practice. At the same time, he notes a lamentable failure to implement the findings of clinical trials into everyday practice.

Desmond Julian is widely admired for his intelligence, warm and charming personality, modesty, broad cultural and historical interests, and the great enthusiasm that he brings to everything that he undertakes. It is well known that he finishes whatever he starts and that the results are always first class. His seemingly inexhaustible energy and editorial skills have led to the publication of more than 20 books. His single author book *Cardiology*, now in its seventh edition since 1970, remains in great demand by medical students and postgraduates.⁴ He is co-editor of *Diseases of the Heart*, a highly re-

spected, major reference source in cardiology, now in its second edition.⁵ Some of his coedited books include *Angina Pectoris*, *Management of Heart Failure*, *Management of Myocardial Infarction*, *Women and Heart Disease*, *Clinical Trials in Cardiology*, and *British Cardiology in the Twentieth Century*.^{6–11} From 1979 to 1988, Julian was the Foundation Editor of the *European Heart Journal*. The American Heart Association chose him to give its prestigious International Lecture in 1975. In 1993, Julian was awarded the honor of Commander of the British Empire (C.B.E.), and in 1998 he was the Gold Medallist of the European Society of Cardiology. In addition, he has received a number of honorary degrees from universities as well as honorary fellowships from the American Heart Association and the Australian Cardiac Society. Despite the many demands of an international professional life, he finds time for his many friends, is an avid reader of fiction, and enjoys theater, entertaining, and the pleasure of walking holidays with his wife Claire.

While working at the National Heart Hospital in London in 1956, his former medical school professor advised him not to pursue a career in cardiology stating that “all the mitrals had been operated upon.”¹² Julian tells this story to explain why he is not pessimistic about the field of cardiology as an exciting place for an aspiring potential cardiologist. The world of cardiology can be thankful that Julian did not follow the advice of his professor.

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