Lester Breslow

Proved that seven habits make for a healthier life

Lester Breslow, public health doctor (b 1915; q 1938 University of Minnesota), died on 9 April 2012 from a cerebrovascular event.

Lester Breslow could hardly believe the data when he reviewed his landmark 1965 survey of adults. ¹ He had expected the study to confirm the benefits of his "seven healthy habits," but "these findings were so striking," he noted in his autobiography, *A Life in Public Health: An Insider's Retrospective*, "that when my colleagues presented them to me I thought they were playing some prank."

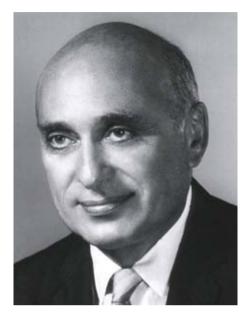
Seven healthy habits

The seven habits were moderate alcohol consumption, no tobacco smoking, regular exercise, seven to eight hours of sleep a day, regular meals with no snacking, maintenance of moderate body weight, and regular consumption of breakfast. Breslow's findings proved scientifically for the first time that people with most of these habits are substantially healthier than those with few.

Walter Holland, emeritus professor of public health medicine at the London School of Economics and Political Science, sees the study as Breslow's most important accomplishment during a nearly 70 year career as "one of public health's greats." Professor Holland, a long time friend, said that Breslow's work was influenced by a strong belief in justice, equality, and social welfare.

The study findings came from Breslow's "human population laboratory" project. The laboratory was Alameda County, near San Francisco, and home to the California state department of public health, where Breslow held several positions. Breslow's team analysed questionnaires filled out by 6928 of the county's adult population, which was then about a million, detailing their health and their adherence to healthy habits.

Breslow's concept was thought so far fetched that his first application for a research grant to the US National Institutes of Health in 1959 was unanimously rejected. Breslow quipped that most health research funding in the 1950s went toward trying to find "magic bullets to prevent or treat diseases." He later gained support from the influential medical statisticians Harold Dorn, of the National Cancer Institute, and Lowell Reed, of Johns Hopkins University, and a second application won grant approval.



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The study's findings showed that a 60 year old with all seven habits would be as healthy as a 30 year old with two habits or fewer. Follow-up studies years later showed that life expectancy for a 45 year old man with at least six habits was 11 years longer than that for a peer with three or fewer.

Breslow's other innovative studies included, as chief of California's Chronic Diseases Bureau, investigating tobacco's negative health effects. He also started California's tumour registry, which has been a resource for hundreds of studies on environmental and behavioural effects on cancer.

Lester Breslow was born on 17 March 1915 in Bismarck, North Dakota, the eldest of four children. His father, a pharmacist, was raised in New York City but had eastern European Jewish roots. The family later moved to Minneapolis, Minnesota, where Breslow attended high school and overcame an embarrassing speech stammer. At 17 he enrolled at the University of Minnesota, already well read in socialist literature and with leftist views that irritated his father.

He began medical studies two years later at the University of Minnesota, planning to become a psychiatrist. But during a disheartening summer internship at a state mental hospital, he changed his mind. A friend convinced Breslow, an active labour rights movement supporter, that his ideology as a political activist for disadvantaged people could be put to good use in public health.

Breslow gained his medical degree in 1938 and followed it with a two year internship at the US Public Health Service Hospital in Stapleton, New York. He returned to Minneapolis and obtained a masters degree in public health in 1941. Despite being married and a father, he volunteered for the army during the second world war, serving as a captain in the medical corps in the Pacific region. He joined the California state department of public health in 1946.

Avid gardener

In 1968, after the initial Alameda County survey, Breslow moved to the University of California, Los Angeles (UCLA) as a professor of public health. In 1972 he was named dean of the school of public health at UCLA. He stepped down in 1980, but remained active on the school's faculty—speaking, writing, and mentoring students. He remained robust and well into his 90s. He did not smoke or drink alcohol, was an avid fruit and vegetable gardener, and walked 12-15 miles a week.

Breslow was a member of the Institute of Medicine of the National Academy of Sciences, and he served as president of the International Epidemiological Association (1967-68), the American Public Health Association (1968-69), and the American Schools of Public Health (1973-75). He was founding editor of the Annual Review of Public Health and editor in chief of the Encyclopedia of Public Health published in 2001. His honours include the Lasker Award, the Sedgwick Memorial Award, the Charles A Dana Award, the Healthtrac Award, the Institute of Medicine's Lienhard Award, and the New York Academy of Medicine Award. Breslow leaves his wife, Devra, and three sons from his first marriage to Alice Philp. Ned Stafford, freelance journalist, Hamburg ns@europefn.de

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References are in the version on bmj.com.

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Marshall Barr



Former consultant anaesthetist Reading Group of Hospitals (b 1934; q Adelaide 1957; FFARACS, FFARCS (now FRCA)), died from malignant melanoma on 8 April 2012

Marshall Barr grew up and studied in Australia. In 1967 he became specialist anaesthetist with the 1st Australian Field Hospital in Vietnam for 18 months, an experience he later described in his 2001 book Surgery, Sand and Saigon Tea. While on a six month appointment at St Bartholomew's Hospital, London, he met Mary; they were married within the year and moved between Australia and the UK until Marshall was appointed consultant anaesthetist to the Reading Group of Hospitals in 1973, where he remained until he retired in 1994. As well as being an outstanding clinical anaesthetist and teacher, Marshall was involved in hospital management. He served on various professional bodies and wrote book reviews, as well as publishing papers on clinical anaesthesia and medical history. He leaves a widow and three children.

Tim Smith

Cite this as: BMJ 2012;344:e3812

John Robert Billinghurst



Former consultant general physician (b 1927; q 1952; MRCP, FRCP, DObstRCOG), d 8 February 2012.

John Robert Billinghurst did his clinical training at the London Hospital. After junior posts and national service he went to Kampala, becoming senior physician at Mengo Hospital. British doctors were expelled, so he returned in 1972 as a locum to Kent and Sussex Hospitals, visiting the Gambia for two

years. He was appointed consultant general physician (interested in neurology) at Oldchurch Hospital and became chairman of the medical committee. He visited overseas, especially China, to demonstrate clinical medicine. His continual care of patients and young colleagues, sound knowledge of medicine and chemistry, his humour, hospitality, and thoughtful friendship were legendary.

Duncan Vere

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Michael Harry Dalton



Former general practitioner, Kingswinford, West Midlands (b 1937; q St Andrews 1963), d 17 July 2011.

Michael Harry Dalton ("Mike") was born in Wales. While at St Andrews he played rugby for the University 15 and became president of the students' representative council. After qualifying he joined the army and served in Sierra Leone and Germany. In 1970 he entered general practice in Kingswinford and stayed for 22 years until he retired to Bridgnorth. Mike had a keen interest in GP obstetrics and was a trainer in general practice. He was secretary of Dudley's local medical committee for 12 years, chairman of the Dudley branch of the BMA, and a member of the family practitioner committee and later health authority boards. He leaves a wife, Diane; three children; and five grandchildren.

David Cripps Stephen Parnell

Cite this as: BMJ 2012;344:e3692

John Gask

Former general practitioner Market Drayton (b 1914; q London 1939), died from pneumonia on 7 February 2012.

John Gask served as surgeon lieutenant in the Royal Navy from 1941 to 1946 and married Dilly in 1945. In 1947 he became a general

practitioner in Market Drayton, Shropshire, where they remained until his retirement in 1980. The couple then moved to Cawsand, Cornwall, where they enjoyed a busy and active retirement until Dilly's death in 2004. An outdoor enthusiast and a keen skier, John pursued a wide range of interests, including archaeology and local and family history. He worked as a volunteer with the Samaritans. He had a great love for and knowledge of trees and transformed six fields at the edge of Bodmin Moor into woodland of great beauty. He leaves a son, a daughter, and two grandchildren.

Robin G B Wood

Cite this as: BMJ 2012;344:e3682

Ernest Munro Jack

General practitioner Bolton (b 1918; q Aberdeen 1945; MRCGP), d 21 April 2012.

While in the Royal Army Medical Corps Ernest Munro Jack served in Germany for two years and developed a special interest in physical and rehabilitation medicine. He joined a general practice in Bolton in 1948, where he worked until retirement in 1986. He chaired the local medical committee, was a member of the executive council and later the family practitioner committee, and was a representative of the local division of the BMA. His recognition of the importance of ongoing professional development led him to join the council of the Bolton Medical Institute; he was chairman from 1980 to 1983. He supported St John Ambulance, becoming a divisional surgeon in 1961 and a serving brother in 1962. He is survived by his wife, a son, a daughter, and a grandson.

Ian FM Jack

Cite this as: BMJ 2012;344:e3815

Raymond Henry Jones

Former general practitioner Risca, South Wales (b 1949; q London 1974), d 5 November 2011.

Raymond Henry Jones ("Ray") studied at St Mary's Hospital Medical School and played rugby for their first 15. In his first year he met his future wife, Sharon, who was studying pharmacy, using their Welshness as his opportunity to ask her out. The couple later moved back to South Wales, and Ray joined



the newly started up vocational training scheme for general practice, working in a practice in Cardiff and Risca. He survived a spinal tumour in 1982. He was a partner at Risca Surgery from 1980 to 2004, working as a GP trainer and undergraduate tutor. He is survived by Sharon and a son.

Sue Emerson Neil Statham

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Margaret Marshall

Former general practitioner Hadlow, Kent (b 1912; q London 1936), d 22 January 2012.

Margaret Fleming was born in Southern Rhodesia (now Zimbabwe) but schooled at Malvern Girls College before studying medicine at the Royal Free. After house jobs she worked briefly in Southern Rhodesia, but returned to England to do her DPH and complete a course in tropical medicine. In September 1939 she worked at Hackney's Queen's Hospital for Sick Children, but when the children were evacuated she was left with no patients, so she took a post as a locum general practitioner in Kent.



There she met her husband, John Marshall, and joined him in the practice until his death in 1963. She took over the running of the practice and remained the sole partner for another 16 years. She partially retired in 1983 but continued to see patients until she was 80, and during this time she arranged for the creation of the Hadlow Medical Centre and the removal of the surgery from her home into the new centre. She leaves two children, five grandchildren, and seven great grandchildren.

Wanda Marshall

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