## Increases in life expectancy likely to be smaller in future

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Though life expectancy rose dramatically during the 20th century—rising by 30 years—additional increases are likely to be smaller, according to a new study.

If current trends in death rates continue, the average life expectancy will reach 85 years in 2033 in France, 2035 in Japan, and 2182 in the United States.

The life expectancy at birth for females in the United States was 79 years in 1995, the most recent data available, and the life expectancy for males was two years lower (*Science* 2001;291: 1491-2.)

According to S Jay Olshansky and colleagues, life expectancy in the United States will not reach 100 years until the 26th century. Their estimate assumes that age and sex specific trends in death rates observed from 1985 to 1995 will continue.

Ten years ago Dr Olshansky and his colleagues published a paper in *Science* in which they said that it was unlikely that life expectancy for males and females was going to exceed 85 years unless new research came up with some widely available, age-extending process.

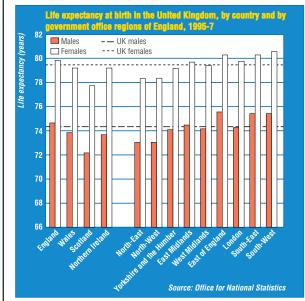
Some people said that progress in biomedical science would permit us to achieve much more rapid increases in life expectancy than we anticipated, Dr Olshansky said.

He and his coworkers saw that as a testable hypothesis, so they waited. After 10 years, they found that although death rates were declining in Japan, France, and the United States, the decline was not enough to raise life expectancy at birth to the higher levels suggested by some other researchers.

Dr Olshansky and colleagues argue that earlier gains were based largely on saving the lives of young people by reducing infant mortality and death from infectious diseases, such as tuberculosis.

But the success of those efforts was so great that even eliminating infant mortality would not increase the average life span by much. "We have exhausted that as a source of longevity," Dr Olshansky said.

"You can't save the young twice. If nobody ever died again before their 51st birthday, you would still add only about 3.5 years to the average life expectancy."



Women in east Dorset can expect to live to the ripest of ages in the United Kingdom, whereas men in Glasgow are likely to have the shortest lives. A new geographical analysis of life expectancy in the United Kingdom by the Office for National Statistics (*Health Statistics Quarterly* spring 2001; vol 9) shows a clear north-south divide, showing differences of up to 10 years. Men in Chiltern, Buckinghamshire, could look forward to a life span of 78.4 years, 10 years longer than those in Glasgow city (68.4). Life expectancy in the United Kingdom between 1995 and 1997 was 74.4 for males and 79.6 for females. In Wales, Scotland, and the Republic of Ireland life expectancy was lower than in England. Those who lived longest, according to region of residence, lived in the south west, followed by the south east and the east of England. The report is available at www.statistics.gov.uk

## Bush's initiative could help groups that promote faith healing

Fred Charatan Florida

Civil liberties groups, secular pressure groups, and some doctors have expressed concern at President George Bush's decision to set up a federal bureau for faith based social services. Religious groups will be able to apply for government funding.

The American Civil Liberties Union, the Americans United for the Separation of Church and State, and the Anti-Defamation League, have all objected to the plan. Some paediatricians are also worried that groups forbidding parents to take their children to doctors, encouraging the use of faith healers alone, will receive funding.

A research study published in 1998 showed that a reliance

on faith healers can put children's lives at risk. Dr Seth Asser of the University of California in San Diego and Dr Rita Swan of CHILD (Children's Healthcare is a Legal Duty) wrote in *Pediatrics* of the deaths of 172 children over a 20 year period whose parents belonged to faith healing sects that forbid traditional medical care for illnesses (*Pediatrics* 1998;101:625-9).

About 81% (140/172) of the children who died succumbed to conditions that normally have a high survival rate (90%) given proper medical attention, the commonest being pneumonia, meningitis, diabetes, and measles.

More than 30 were from Colorado, where three children

have died in the past two years because their parents, members of the General Assembly and Church of the First Born, denied them medical treatment on religious grounds. These parents believed that prayer, rather than medical treatment, cures illnesses and disabilities.

Marvin Peterson, an elder of the church to which the families of the three dead children belong, said that a member recently fell off a ladder and cracked open her skull. After elders prayed and anointed her with oil, he said, she recovered.

"Tve seen people healed of cancer-seen it with my own eyes," Mr Peterson said, taking strong exception to critics who characterise the church as a cult. "We believe that if it's the Lord's will, you will rise up."

Largely as a result of intense lobbying by the Church of Christ, Scientist, which also favours prayer over medicine, Colorado and 45 other states have statutes that allow parents to use their religious beliefs as a defence against criminal prosecution for withholding medical treatment from their children.

The US Supreme Court has twice—in 1944 and 1990 affirmed a child's constitutional right to medical treatment. In its 1944 decision, the court said that, although parents "may be free to become martyrs themselves, it does not follow that they are free in identical circumstances to make martyrs of their children."

In the Child Abuse Prevention and Treatment Act of 1996, however, Congress said that there was no federal requirement that a child must be provided with "any medical service or treatment against the religious beliefs of the parent or legal guardian."

Opponents calling for the repeal of the religious exemption said that this simply sanctified a form of child abuse.  $\Box$