

Masala

The rich do live longer!

A group of economists assessed the relationship between income and life expectancy in the USA. Data on income were obtained from 1.4 billion de-identified tax records between 1999 and 2014 and mortality data from Social Security Administration death records. These data were used to estimate life expectancy at 40 years of age. The sample consisted of 1 408 287 218 person-year observations for individuals aged 40 to 76 years with a mean age of 53 years and median household earnings of \$61 175 per year. Higher income was associated with greater longevity throughout the income distribution. There was a gap of 14.6 years in life expectancy between the richest 1% and poorest 1% of individuals for men and 10.1 years for women. Over time the rise in life expectancy was much greater for the rich as compared to the poor. Between 2001 and 2014, life expectancy increased by 2.34 years for men and 2.91 years for women in the top 5% of the income distribution, but by only 0.32 years for men and 0.04 years for women in the bottom 5% (*JAMA* 2016. Published online 10 Apr 2016. doi:10.1001/jama.2016.4226).

From the frying pan ... into the fire!

From Brigham and Women's Hospital, Boston comes this intriguing report of the hazards of indiscriminately using stem cells. The authors report the case of a 66-year-old man who underwent intrathecal infusions of stem cells in Argentina, Mexico and China for the treatment of residual deficit from an ischaemic stroke. He then developed progressive lower back pain, paraplegia and urinary incontinence. Imaging revealed a lesion of the thoracic spinal cord and thecal sac; a biopsy showed a densely cellular, highly proliferative, primitive neoplasm with glial differentiation. DNA fingerprinting revealed that the cells in this tumour were not host cells and were likely to have originated from the infused stem cells. The tumour could not be categorized as one of the known glial neoplasms. The authors caution against the tumorigenic potential of stem cells (*N Engl J Med* 2016;**375**:196–8).

Cancer did not spare even pre-historic man

Recent findings from a hominin metatarsal specimen found in South Africa challenge the assumption that the increased incidence of malignancies is the result of a polluted environment and lifestyle changes. At Swartkrans, 40 km northwest of Johannesburg, hominin specimens were found in caves; of these, SK 7923 is a fifth metatarsal from a primitive ancestor. This specimen has a hemispherical bony mass located on the shaft, abutting the cortical bone surface. A team of researchers from Johannesburg had initially diagnosed this lesion to be an osteoid osteoma. However, they re-analysed the specimen by using micro focus X-ray computed tomography. This revealed evidence of remodelling and bone formation. Findings were very similar to those in a recently diagnosed osteosarcoma of the femur. The authors concluded that the specimen represented the earliest reported case of malignancy

in pre-historic man (*S Afr J Sci* 2016;**112**:2015-0471, <http://dx.doi.org/10.17159/sajs.2016/20150471>).

Cardiovascular outcomes with newer oral anti-diabetic drugs

To assess the outcomes of treatment in patients with type 2 diabetes mellitus, researchers studied data from 469 688 patients from 1243 general practices in the UK registered in the Qresearch database. Exposure was defined as the drug therapy received by these patients and outcomes included cardiovascular disease, heart failure and all-cause mortality. Of newer anti-diabetes drugs, users of gliptins had an 18% decreased risk of all-cause mortality and a 14% reduced risk of heart failure compared with patients who did not use these drugs. Similarly, glitazone use was associated with a 23% reduction in all-cause mortality, 26% decreased risk of heart failure and a 25% reduced risk of cardiovascular disease (*BMJ* 2016;**354**:i3477).

Pioglitazone use and the risk of bladder cancer

Pioglitazone is an insulin-sensitizing drug used in the treatment of type 2 diabetes. Concerns have been raised regarding an increase in the risk of carcinoma of the urinary bladder with its use; hence the drug was briefly banned in India in 2015. Researchers analysed retrospective data from patient databases in Sweden, Finland, the Netherlands and UK, which included 56 337 patients with type 2 diabetes who had been given pioglitazone and 317 109 matched patients who were given other drugs for their diabetes. After a mean follow-up of 2.9 years, 130 urinary bladder cancers occurred in the pioglitazone-treated group and 153 in the matched cohort (hazard ratio for bladder cancer 0.99). There was no increased risk of bladder cancer with higher cumulative doses or duration of treatment with pioglitazone (*BMJ* 2016;**354**:i3903).

The mystery of Shackleton's heart

Between 1901 and 1922, Sir Ernest Shackleton undertook four voyages to explore Antarctica. On three of these expeditions, he suffered physical breakdowns. Much speculation has gone into the cause for his failing health. Researchers from the Royal Brompton Hospital, London, analysed diary entries made by Dr Eric Marshall, the medical officer on Shackleton's second expedition to the Antarctic (1907–9) in the *Nimrod*. The diary entries describe Shackleton as being exhausted with heavy work, the finding of tachycardia with an irregular pulse and the auscultation by Dr Marshall of a pulmonary systolic murmur. The authors concluded that the cardiac disease was possibly atrial septal defect with an arrhythmia and that Shackleton was aware of this, avoiding medical evaluation for fear of being prevented from going on his expeditions. The cause of his premature death at the age of 47 remains unclear but could have been related to his congenital heart disease or to atherosclerosis since he was a heavy smoker (*J Royal Soc Med* 2016;**109**:106–8).

VIVEK ARYA

Notices

1. **Sixty-ninth Annual National Conference of the Indian Psychiatric Society 2017 (ANCIPS), Raipur, Chhattisgarh, India 5–8 January 2017**
Information: Manoj K. Sahu, Secretariat, Organizing Secretary ANCIPS 2017, Department of Psychiatry, Ward No. 22, Pt JNM Medical College and Dr BR Ambedkar Hospital, Raipur 492001, Chhattisgarh; info@ancips2017.com; www.ancips2017.com
2. **Fourteenth Asia Pacific Medical Education Conference 2017 (APMEC 2017), Singapore 11–15 January 2017**
Information: http://medicine.nus.edu.sg/CenMED/apmec14/conference_info.html
3. **The Tenth International Conference on Acute Cardiac Care, Tel Aviv, Israel 15–17 January 2017**
Information: Secretariat, ISAS International Seminars, POB 574, Jerusalem, 9100402, Israel; seminars@isas.co.il; www.isas.co.il/cardiac-care2017
4. **Seventy-second Annual Conference of the Association of Physicians of India (APICON 2017), Mumbai, Maharashtra, India 26–29 January 2017**
Information: <http://sci.apicon2017.com/>
5. **Seventh International Workshop on HIV and Women, Seattle, WA, USA 11–12 February 2017**
Information: www.virology-education.com/wp-content/uploads/2016/04/HIV-WOMEN-Workshop_Sponsorship-Request-2017.pdf
6. **Indian Council of Medical Research–National Institute of Immunohaematology Diamond Jubilee International Conference on Revolution of Laboratory Medicine in Modern Biology, Mumbai, Maharashtra, India 15–17 February 2017**
Information: Organizing Secretariat, Diamond Jubilee Conference, National Institute of Immunohaematology (ICMR), 13th Floor, MS Building, KEM Hospital Campus, Parel, Mumbai 400012, Maharashtra; niidiamondjubilee@gmail.com; www.niidiamondjubilee.com
7. **Twenty-sixth Conference of the Asian Pacific Association for the Study of the Liver (APASL), Shanghai, China 15–19 February 2017**
Information: www.apasl2017.org/#/
8. **The First World Congress of Gastrointestinal Endoscopy, Hyderabad, Andhra Pradesh, India 16–19 February 2017**
Information: D. Nageshwar Reddy, President, ENDO 2017; <http://endo-2017.org/>
9. **Twentieth Annual Conference of Indian Association of Cardiovascular Thoracic Anesthesiologists 2017 (IACTA 2017), Pune, Maharashtra, India 16–19 February 2017**
Information: www.iacta2017pune.com
10. **First World Congress on Cardiac Imaging and Clinical Cardiology 2017 (WCCICC 2017), Mumbai, Maharashtra, India 23–26 February 2017**
Information: G.N. Mahapatra, Department of Nuclear Medicine, PET CT and SPECT CT, Seven Hills Hospital, Marol-Maroshi Road, Andheri (East), Mumbai 400059, Maharashtra; mahpatrag@rediffmail.com, drgmahapatra@sevenhillshospital.com; www.wccicc2017.com; wccicc2017@rediffmail.com
11. **18th Annual Conference 2017 of Indian Society of Neuroanaesthesiology and Critical Care (ISNACC 2017), Chandigarh, India 24–26 February 2017**
Information: www.isnacc2017.org.in/index.aspx
12. **Third National Course on Public Health Approaches to Non-communicable Diseases (NCDs), PGIMER, Chandigarh, India 2–7 March 2017**
Information: *Coordinator*, J.S. Thakur, School of Public Health, PGIMER, Chandigarh; *Joint Course Coordinator*, Anand Krishnan, Centre for Community Medicine, All India Institute of Medical Sciences (AIIMS), New Delhi; jsthakur64@gmail.com
13. **Twelfth World Conference Bioethics, Medical Ethics and Health Law, Limassol, Cyprus 21–23 March 2017**
Information: Secretariat, ISAS International Seminars, POB 574, Jerusalem 9100402, Israel; seminars@isas.co.il
14. **The Twelfth International Congress on Systemic Lupus Erythematosus (LUPUS 2017) and the 7th Asian Congress on Autoimmunity (ACA 2017), Melbourne, Australia 26–29 March 2017**
Information: <http://lupus2017.org/>
15. **Fifteenth World Congress on Public Health, Melbourne, Australia 3–7 April 2017**
Information: WCPH 2017 Secretariat, GPO Box 3270, Sydney NSW 2001, Australia; info@wcp2017.com
16. **Twelfth International Medical Education Conference—Health Professions Education without Borders, Kuala Lumpur, Malaysia 7–9 April 2017**
Information: <http://imu.edu.my/imec/index.php>
17. **Twelfth International Congress of Dermatology, Buenos Aires, Argentina 18–22 April 2017**
Information: Congress Office Ana Juan Congressos, Juana Azurduy 1844 I 1429 Buenos Aires, Argentina; www.icd2017.com.ar/contact-us.html
18. **World Diabetes and Endocrinology Summit—2017, Dubai, United Arab Emirates 19–21 April 2017**
Information: <http://endodiabetessummit.org/>
19. **Ninth International Congress of Cardiovascular Disease, ‘Sudden Cardiac Death from Prevention to Intervention’, Dubai, United Arab Emirates 20–23 April 2017**
Information: www.iccd-dubai.com/
20. **Sixth World Congress on ADHD (Attention Deficit and Hyperactivity Disorders), Vancouver, Canada 20–23 April 2017**
Information: www.adhd-congress.org
21. **Twentieth World Congress on Disaster and Emergency Medicine, Toronto, Canada 25–28 April 2017**
Information: WSP Rome 2017 Venue, Ergife Palace Hotel Via Aurelia, 619 – 00165, Rome, Italy; <https://wadem.org/>
22. **First International Congress of Micro-Immunotherapy (ICoMI), Palma de Mallorca, Spain 18–20 May 2017**
Information: www.CoMI2017.com; info@icomi2017.org
23. **Sixth Asian Conference on Hepatitis and AIDS (ACHA), Shenzhen, China 20–21 May 2017**
Information: www.aids-care.org.tw/Flyer_6ACHA_20161102.pdf
24. **Fourth International Conference on Chronic Obstructive Pulmonary Disease, Osaka, Japan 29–31 May 2017**
Information: Conference Secretariat 2360 Corporate Circle, Suite 400, Henderson, NV 89074-7722; copd@infectiousconferences.com
25. **Sixth Annual World Course in Advanced Techniques in Neurosurgical Oncology, London, UK 7–11 June 2017**
Information: www.neurosurgery-courses.com
26. **Transmission of Respiratory Viruses: From basic science to evidence based options for control (ISIRV), Hong Kong 19–21 June 2017**
Information: <https://transmission2017.med.hku.hk/>
27. **World Summit on Pediatrics, Rome, Italy 22–25 June 2017**
Information: info@wsp-congress.com
28. **Twelfth International Congress on Complications during Percutaneous Cardiovascular Intervention: Management and Prevention, Lausanne, Switzerland 28–30 June 2017**
Information: <http://ecc-conference.com/index.php>
29. **Twenty-first Asian Pacific Society of Cardiology Congress, Singapore 13–15 July 2017**
Information: www.apsc2017.com
30. **Ninth International AIDS Society Conference on HIV Science, Paris, France 23–26 July 2017**
Information: www.IAS2017.org
31. **Twenty-third World Congress of Clinical Cardiology, Echocardiography and Allied Imaging Techniques and Twenty-second Annual Conference of Indian Academy of Echocardiography, Jaipur, Rajasthan, India**
Information: info@worldcongressofcardioecho2017.com; <http://worldcongressofcardioecho2017.com/>