Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
Ten Most Important Health Stories of 2003

The Wall Street Journal generated the following list of significant developments last year.

1. Severe Acute Respiratory Syndrome (SARS). The fact that a hitherto unknown disease could emerge from the rural regions of China and spread to Toronto and elsewhere in a single season reveals just how interconnected and vulnerable our world has become.

For more information, visit the Centers for Disease Control and Prevention SARS Web site at www.cdc.gov/ncidod/sars/.

2. Medicare overhaul. The passage of Medicare overhaul illustrates how difficult it is to make fundamental changes in our health care system.

For more information, visit Medicare.org.

3. Reimportation. Entire states want to take advantage of Canada’s lower priced drugs in defiance of the Food and Drug Administration’s restrictions. The reimportation issue has taken on the trappings of a populist revolt that continues to gather steam.

For more information, visit www.phrma.org/issues/reimportation and www.aarp.org/states/wi/articles/a2003-11-18-wi-canada.html.

4. Over-the-counter medicine. First to hit store shelves was allergy remedy Claritin, then stomach remedy Prilosec, and soon perhaps the emergency contraceptive Plan B. Making a drug available without a prescription can cut down on unnecessary physician visits and save insurers’ money.

For more information, visit www.nlm.nih.gov/medlineplus/druginformation.html.

5. Plight of the uninsured. According to Congressional Budget Office estimates, between 21 and 31 million Americans lack health insurance, and the problem is predicted to worsen.

For more information, visit Kaisernetwork.org.

6. The underground market in prescription drugs. Counterfeit, diluted, or outright sham medications pose untold dangers. Not since the 19th century have potentially harmful drugs been so readily available.

For more information, visit www.washingtonpost.com/wpdyn/health/specials/pharmaceuticals.

7. Targeted health research. A statement from the National Institutes of Health—a politically powerful and very well-funded agency—said, “In these initiatives, NIH will promote the creation of better integrated networks of academic centers that work jointly on clinical trials and that include community based physicians.”

For more information, visit www.nihroadmap.nih.gov.

8. Obesity. The obesity epidemic is changing the food industry by promising new products aimed at lean-thinking consumers.

For more information, visit www.cdc.gov/nccdphp/dnpa/obesity.

9. Offshore outsourcing. Biotech research and pharmaceutical development industries are sending jobs overseas just as information technology and manufacturing did. New players such as Cuba, India, and Brazil are entering the fray. One key question: Will safety, health, and ethical considerations be brushed aside as nations compete to lure biotech companies?

For more information, visit www.biomedical-outsourcing.com.

10. Open access. Why should Americans pay to see the results of research underwritten by their tax dollars, open-access proponents argue? They aim to make that information available free to everyone on the Internet, which threatens established journal publishers. Critical to making open access succeed is instilling it with the same kind of quality peer review found in traditional journals.

For more information, visit www.plos.org.

Cost of Individual Depression Treatment Falls

The cost of treating a depressed person fell throughout the 1990s, largely because of a switch from hospitalization to medication, according to findings of a study published in the Journal of Clinical Psychiatry. The overall cost of treating the illness, however, rose 31% during the decade to $26 billion because of a sharp rise in the number of patients.

The study found that the rate of treatment for depression—the share of people who sought help—rose 56% during the decade. However, annual costs per treated case fell to $3300 in 2000, down almost 19% from the 1990 level.

The study was a follow-up to an assessment done in 1990. The new study concluded that the total economic cost of depression increased 7% from 1990 to 2000, in inflation-adjusted 2000 dollars. Both studies were funded by Eli Lilly, a major manufacturer of anti-depressants.

According to the National Institute of Mental Health in Bethesda, Md, 9.5% of U.S. adults suffer from depression. The cost of reduced productivity because of depression in the workplace remained nearly the same from 1990 to 2000, raising questions about the adequacy of current treatment. The study found that workplace problems, such as absenteeism and lost productivity, cost about $52 billion, almost unchanged from the 1990s level.

A study published a year ago in JAMA found that the number of Americans treated for depression more than tripled between 1987 and 1997, rising to 6.3 million from 1.7 million. The increase reflects a growing awareness of the illness, a fading stigma attached to it, and increased treatment options.

To correct the obvious gap in the quality of care that the study revealed, experts said doctors should use a standardized checklist to thoroughly evaluate a patient’s progress and increase coordination with psychiatrists, and employers should offer more coverage for the illness.
FDA Approves 10-Minute Test for HIV Detection in Health Workers

Trinity Biotech PLC said the Food and Drug Administration has approved its 10-minute HIV test, the first product cleared for testing blood serum, plasma, and whole blood. The Dublin-based company plans to market its Uni-Gold Recombigen HIV test, which costs $10 a pop, to government programs, physicians, and hospitals that need a quick test for health workers who accidentally prick their fingers with bloody needles. Traditional laboratory tests can take days or weeks to return results.

The test requires one drop of whole blood, serum, or plasma. In the company’s trials of more than 9000 patient samples, the test detected 100% of the HIV-positive specimens and was 99.7% accurate on the negative samples.

Wall Street Journal, Dec 29, 2003

Younger Black Men Should Be Screened for Prostate Cancer

The American Cancer Society (ACS) guideline to begin screening black men at an earlier age than other races is appropriate, according to a study in the December 2003 issue of the International Journal of Radiation Oncology-Biology-Physics, the official journal of the American Society for Therapeutic Radiology and Oncology.

In 2002, adenocarcinoma of the prostate was the most common cancer diagnosed in men. As the incidence of prostate cancer has increased, so has the difference in diagnosis rates between whites and blacks, whose mortality rate is double that of whites. In 1997, ACS updated screening guidelines for the early detection of prostate cancer to include the following: “Men in high-risk groups, such as those with strong familial predisposition or African-Americans, may begin screening at a younger age (ie, 45).”

This study aimed to determine whether black men diagnosed with prostate cancer in the prostate-specific antigen (PSA) era differed in initial presenting serum PSA levels (iPSA) compared with white men and to determine any trends in iPSA in these men between the periods before the guideline change (1990-1996) and afterward (1997-2001). Of the 4519 patients with prostate cancer initially seen, 2332 qualified for this analysis. Among these patients 1968 were white and 364 were black.

Black men presented with about 36% higher PSA levels than white men for the first period and 13% for the second period. Taken as a whole, this analysis suggests that the difference in iPSA between black and white men diminished in the 1997-2001 period compared with the earlier period.

Age at diagnosis was significantly younger for black men compared with whites. This effect was seen in both periods. Between 1990 and 1996, black men were 2.5 years younger than white men at the time of diagnosis. After 1996, the age gap increased to 3.1 years.

For details, go to www.astro.org.

Quality Care “Gap” May Kill 57,000 Annually

More than 57,000 Americans die needlessly every year because they don’t receive the appropriate health care routinely provided by some health plans, according to a study by the National Committee for Quality Assurance. Those estimates reflect the U.S. health care system’s weak performance on such measures as controlling heart patients’ high blood pressure and diabetics’ blood-sugar levels.

For the fourth straight year, quality of care improved in managed health plans whose performance is measured by national standards, but a gap is widening that prevents millions of Americans from receiving the best care, according to the study.

The study reveals a troubling trend for physicians, health experts, and government policy makers—information about the best ways to detect and treat disease takes far too long to become part of standard practice. The NCQA hopes to improve overall medical practice by making health plans accountable for their performance.

One of the study’s most alarming conclusions is that missed healthcare opportunities cost the nation more than $1 billion a year in avoidable hospital bills. The report faults the system’s failure to provide the best treatment for asthma, depression, diabetes, heart disease, and high blood pressure with nearly 41 million annual sick days, resulting in a loss of $11.5 billion annually by American businesses.

The NCQA study is its first to put a price on the system’s failures and missed opportunities. Data used in the study were submitted by 513 health plans that collectively cover more than 71 million people, about a third of the insured population.

Wall Street Journal online, Sept 22, 2003

Most Heart Attacks Preceded by at Least One Major Risk Factor

The August 20 issue of JAMA reported that two studies involving more than 500,000 patients show that at least 80% of heart attacks occur in people with one of four major risk factors for heart disease—high cholesterol, high blood pressure, diabetes, and smoking.

These findings give new urgency for physicians and patients to initiate and maintain discussion about cardiovascular disease risk factors and methods for reducing and managing risk, including a daily aspirin regimen when appropriate. The American Heart Association and the U.S. Preventive Services Task Force recommend that doctors consider aspirin therapy to prevent a first heart attack in the nearly 62 million people at risk for cardiovascular disease.

For more information, go to www.senseihealth.com.

January/February 2004 TCM 11
Hurting Workers Cost Employers Billions

U.S. business lose an estimated $61.2 billion each year from the 1 in 8 workers who is in pain and missing productive time at work, according to a study in JAMA. Headache topped the list of common pains, followed by back pain and arthritis, according to the physicians who randomly sampled 28,902 working adults in the United States over the course of a year ending July 30, 2002.

Workers in pain lose an average of 5 hours a week in productivity, said Dr Walter Stewart, lead author of the study, and three quarters of them lose productive time from reduced performance, not absence. Given that 97% of U.S. workers are on the job on a daily basis, employees go to work in pain more often than not, he said. Workers in pain might get start-ed slowly, work more slowly, or have lots of downtime, he said.

Chiropractic Care as a Red Flag?

According to an article in the October 20 issue of Business Insurance, for workers' compensation cases in which chiroprac-tors are the exclusive provider, total costs per claim are 16% to 25% higher than in cases directed by physicians. The figures come from the Workers Compensation Research Institute in Boston. Medical costs are 17% to 21% higher in chiropractor-led cases when factoring in the costs of complete treatment—physical medicine, radiology, supplies, and prescriptions.

One solution the article proposed to avoid overutilization of chiropractors is case management. “Perhaps a more effective way to ensure claimants are receiving appropriate chiropractic care is to monitor the treatment, intervening when necessary, and measure outcomes...” by assigning a case manager.

Health Gap between Whites, Minorities Expensive

Costs to taxpayers, patients, and employers totaling $331 billion in medical expenditures and lost productivity could be incurred during the next 7 years from the health gap between whites and mi-norities in the United States in three critical chronic disease areas, says a study released last fall by Standard & Poor’s Corporate Value Consulting (CVC), a provider of independent and objective valuations and corporate finance analysis. The CVC developed the study, “Closing the Health Gap: An Economic Analysis,” to quantify the potential economic impact of efforts such as the U.S. Department of Health and Human Services initiative to “Close the Health Gap,” an educational campaign designed to make good health an important issue among racial and ethnic mi-nority populations. The study can be found at www.standardandpoors.com.

The analysis compares the broad economic costs of diabetes, hyperten-sion, and HIV/AIDS across white, black, and Hispanic populations. Based on assessments of existing literature and valuation analysis of the costs for direct medical attention and lost productivity as a result of disability and premature mortality, the study determined the yearly cost of the health gap for these three conditions at $19.1 billion, $8.5 billion, and $11 billion, re-spectively. Adjusting for the overlap between diabetes and hypertension, CVC estimates that the combined total economic benefit of closing the popula-tion health gap for these diseases is $35.8 billion in 2002, or $331 billion from 2004 through 2010.

Diagnostic Test for Chest Pain Predicts Cardiac Risk 6 Months Early

Cleveland Clinic researchers have identified a new blood test to determine whether a person is in imminent danger of heart attack or death. The test is espe-cially valuable for identifying at-risk pa-tients not recognized by current diag-nostic laboratory testing.

The new test measures the blood-stream level of myeloperoxidase (MPO), an enzyme found in disease-fighting white blood cells. Previous research has found that an elevated MPO level in white blood cells can signal a risk for heart disease. This latest study goes a step further, determining that a high MPO level in plasma can also identify people at increased risk for heart attack, in need of bypass surgery or angioplasty, or at increased risk for cardiac death within 6 months of presenting to the ED with chest pain. Complete study results appeared in the October 23 issue of the New England Journal of Medicine.

Cleveland researchers looked at more than 600 sequential patients who came to the ED with chest pain and found that adding MPO testing to cur-rent laboratory-based risk assessments increased the ability to predict future cardiac risks during the next 30 days to 6 months from 50% to 95%. An elevated MPO level in people with cardiovascu-lar disease indicates arterial inflamma-tion. Previous studies have linked inflamma-tion to increased risk of cardiovascular events.

Other measures of arterial inflamma-tion, including C-reactive protein (CRP), also help clinicians to gauge the risk of cardiac events. But in head-to-head comparisons in the ED setting, CRP test-ing was much less effective than MPO.

The study included 604 patients who arrived at the ED after the onset of chest pain. MPO levels at that time were significantly higher in those who were ex-periencing a heart attack, as well as in patients who, within 6 months after pre-senting at the ED, experienced a heart attack or stroke, required bypass surgery or angioplasty, or died.

Go to www.clevelandclinic.org for details.