

RMRC, Bhubaneswar

(Laxmi Narayan Memorial Library)

Weekly Current Awareness Service

Vol.2 # 25

19th June

2017

A GOOD LIBRARY IS A PLACE, A PALACE WHERE THE LOFTY SPIRITS OF ALL NATIONS AND GENERATIONS MEET.

— SAMUEL NIGER

About Monday Morning

Monday morning is a weekly E- CAS (Electronic Current Awareness Service) of RMRC Library, Bhubaneswar which carries one Biomedical & health science news item and some useful current medical research links so that the scientists can access the articles. This E- Bulletin starts its journey from 21st Nov. 2016. In this maiden attempt we cordially invite your inputs and suggestions to improve in future.

Dr. Banamber Sahoo, Lib & Inf. Officer
Satyajit Nayak & Twinkle Rout (Lib. Trainee)

Back pain increases suicide risk?

Study led by Detroit scientist shows link between chronic ailments & tendency to take life

NEW YORK: Several physical health conditions, including ailments such as back pain, diabetes, and heart disease, are associated with an increased risk of suicide, says a study.

The findings, published in *American Journal of Preventive Medicine*, suggest that chronic illness, even in patients with no mental-health problems, raises suicide risk substantially.

Two of the conditions — sleep disorders and HIV/AIDS — represented a greater than twofold increase, while traumatic brain injury made individuals nine times more likely to die by suicide, the study said.

“Although suicide risk appears to be pervasive across most physical health conditions, prevention efforts appear to be particularly important for patients with a traumatic brain injury, whose odds of suicide are increased nearly nine-fold,” said lead investigator Brian Ahmedani of Henry Ford



Research implications

Seventeen of 19 medical conditions studied were linked to increased risk, including asthma, back pain, brain injury, cancer and congestive heart failure.

Health System in Detroit, Michigan.

This study included 2,674 individuals who died by suicide between 2000 and 2013 along with 2,67,400 controls matched on year and location in a case-control study across eight Mental Health

Research Network health-care systems.

Seventeen of 19 medical conditions investigated were linked to an increased suicide risk: asthma, back pain, brain injury, cancer, congestive heart failure, chronic obstructive pulmonary dis-

order, diabetes, epilepsy, HIV/AIDS, heart disease, hypertension, migraine, Parkinson's disease, psychogenic pain, renal disorder, sleep disorders, and stroke.

While all of these were associated with greater risk, some conditions showed a stronger association than others.

For example, people with a traumatic brain injury were nine times more likely to die by suicide, while those with sleep disorders and HIV/AIDS were at a greater than twofold risk.

Along with varying rates among conditions, having multiple physical health conditions also substantially increased risk.

Targeted interventions in primary care and specialty care may be the key to preventing suicides. “Conditions such as back pain and traumatic brain injury are common, making patients with these primary targets for suicide prevention,” Ahmedani said.

1. Light-activated bacteria protect rats from heart attacks.

When a heart attack strikes, blood stops flowing to parts of the heart, starving the tissue of oxygen and killing cardiac cells. Scientists have long speculated that if they could provide those cells with an emergency supply of oxygen until surgeons restored blood flow with a coronary bypass, some permanent damage to cardiac tissue could be prevented, thereby preserving heart function. A new study with rats suggests an innovative way to do that: infecting the heart with photosynthesizing bacteria that naturally produce oxygen when exposed to light. For more details click on the below link.

<http://www.sciencemag.org/news/2017/06/light-activated-bacteria-protect-rats-heart-attacks>

2. Eye-opening picture of fetal immune system emerges.

A human fetus in its second trimester is extraordinarily busy. It is developing skin and bones, the ability to hear and swallow, and working on its first bowel movement. Now, a study published on 14 June in *Nature* finds that fetuses are also acquiring a functioning immune system — one that can recognize foreign proteins, but is less inclined than a mature immune system to go on the attack. For more details click on the below link.

<http://www.nature.com/news/eye-opening-picture-of-fetal-immune-system-emerges-1.22144>

3. A mechanical trigger for toxic tumor therapy.

Cells in nearly any part of the body can become cancerous and transform into tumors. Some, like skin cancer, are relatively accessible to treatment via surgery or radiation, which minimizes damage to healthy cells; others, like pancreatic cancer, are deep in the body and can only be reached by flooding the bloodstream with cell-killing chemotherapies that, ideally, shrink tumors by accumulating in their ill-formed blood and lymph vessels in higher amounts than in vessels of healthy tissues. For more details click on the below link.

https://www.eurekalert.org/pub_releases/2017-06/wifb-amt061417.php

4. Preventing major gastrointestinal bleeding in elderly patients.

Antiplatelet therapy is the most frequently recommended treatment to prevent recurrent ischaemic events in patients who have had an ischaemic stroke, an acute coronary syndrome, or symptomatic peripheral arterial disease. The most frequently used drugs are aspirin or clopidogrel. Most guidelines recommend lifelong intake of antiplatelet therapy. However, randomised trials that have investigated the benefit of antiplatelet therapy had an observation period of between 2 years and 4 years.¹ Therefore, we lack data on the long-term benefit and risk of antiplatelet therapy across long time periods, particularly in elderly patients. For more details click on the below link.

[http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(17\)31507-6/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(17)31507-6/fulltext)



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