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SOUTH AFRICAN NEWS

Counting the costs of flu

1 July 2016

The study by Global Hygiene Council (GHC) of more than 9 000 people across 17 countries including South Africa found that the average person misses 4.5 days of school or work due to an infection and 91% of people reported taking at least some time off work or school due to an infection in 2014. The GHC member Dr Kgosi Letlape said the socio-economic implications of cold and flu, such as health complications, lost productivity, school absenteeism and cost of healthcare can be limited by avoiding the spread of flu and cold. Colds and flu are respiratory infections transmitted by a virus. Although infections happen throughout the year, more people tend to be infected with cold and flu throughout the autumn and winter. He further informed that, contrary to popular belief, colds and flu are not caused by the weather. The biggest reason the illnesses are more prevalent in winter is because people tend to stick very close to each other because it is so cold, which means the chance of passing on illness-causing germs is a lot higher. The influenza season is usually between the last week of April and the first week of July, but according to the National Institute for Communicable Diseases (NICD) this can change year to year.

Steve Mabona, spokesperson for the Gauteng Department of Health said, for the 2015/16 year the department procured 1150 units of flu vaccine to the value of R64331. The burden of flu is usually high during winter. However, public health facilities have enough stock and never run out of vaccines. He also added that the department procured flu vaccines annually at the beginning of each flu season, which are then given to specific target groups namely, pregnant women, people with chronic medical conditions, including people living with HIV and Aids and pensioners.

For more info: <https://www.health-e.org.za/2016/07/01/counting-costs-flu/>

South Africans to eat less salt as new law kicks in

1 July 2016

The Heart and Stroke Foundation South Africa (HSFSA) is very concerned about the fact that South Africans eat on average double the recommended daily salt limit of 5 grams a day. Most of this salt does not come from what consumers add themselves, but rather from what is added during manufacturing. Excess salt intake can increase hypertension, thereby contributing to heart disease, strokes and kidney disease. From today South Africans will eat a little less salt as legislation comes into effect to reduce the salt content of commonly consumed foods. Most salt is hidden in everyday foods. On average, 4 slices of bread provide 1.6 grams or a quarter teaspoon of salt per day, a third of the recommended maximum. A portion of sausage or boerewors can provide 2.5 grams of salt. Even sweet breakfast cereals can bump up salt intake by another gram. The amendment to the foodstuff regulations was published in the Government Gazette in March 2013. A three year implementation period was granted to allow time for manufacturers to experiment with

reformulation and produce lower salt products that are still acceptable to consumers. New salt legislation comes into effect on 30 June 2016, as a result manufacturers need to stick with new salt levels.

Health Minister, Dr Aaron Motsoaledi's ground-breaking bill imposes maximum salt level targets for a basket of commonly consumed foods. Foods affected includes bread, breakfast cereal, margarines and butter, savoury snacks, potato crisps, processed meats, sausages, soup and gravy powders, instant noodles and stocks. Each of these food categories has an individual target to be achieved in 2016 and another stricter limit that needs to be met by 2019.

For more info: <http://www.health24.com/Medical/Hypertension/Lifestyle-changes/south-africans-to-eat-less-salt-as-new-law-kicks-in-20160630>

Pregnancy flu shot protects newborn for 8 weeks

5 July 2016

A new study conducted by University of the Witwatersrand revealed that a flu shot during pregnancy protects newborns against the flu for about two months after birth. Dr Marta Nunes of University of the Witwatersrand and her co-authors indicated that previous studies have shown that flu vaccination during pregnancy helps protect newborns. This study shows the length of protection is likely limited to the first 8 weeks of life. Researchers assessed more than 1 000 infants born to women given a flu shot during pregnancy. They found the vaccine's effectiveness was highest 85.6% during the first eight weeks after birth. Effectiveness ranged from about 25% to 30% at ages 8 to 16 weeks and 16 to 24 weeks. The findings were published online July 5 in the journal *JAMA Pediatrics*. The study authors said the results are important because infants have high rates of flu which puts them at risk for hospitalization and death. They added that, current vaccines do not work well in infants younger than 6 months and are not approved for use in that age group,

For more info: http://www.centersite.net/poc/view_doc.php?type=news&id=182515&cn=342

South Africa among African countries benefited from power of HIV prevention in children

13 July 2016

HIV infection rates amongst children in eastern and southern Africa are steadily declining. According to a new report published on the 12 July 2016 by the Joint United Nations Programme on HIV/AIDS (UNAIDS), more moms in the region are receiving essential HIV medication to stop the virus infecting their babies. Since 2010 there has been a massive 66% drop in new HIV infections among children in eastern and southern Africa with an estimated 56 000 occurring in 2015. This impressive decline is largely thanks to the rapid increase in coverage of services for prevention of mother-to child transmission (PMTCT) from 61% in 2010 to 90% in 2015. The Prevention gap report" identifies trends in new HIV infections around the globe and shows that while new infections amongst adults have stopped declining, infections among children have dropped by over 70% since 2001. PMTCT includes a range of services to reduce the risk of transmission from a mother to her baby, primarily providing her with effective antiretroviral therapy.

According to South Africa's National Institute for Communicable Diseases, the country has made dramatic progress with its PMTCT programme which started in 2004. At that time over 20% of babies born to HIV positive mothers became infected, but by 2014 this figure had plummeted to 1.8%. Although the region (eastern and southern Africa) is home to 6.2% of the world's population, it contains half the planet's people living with HIV. According to the report, 46% of new HIV infections in 2015 occurred in the region with South Africa alone responsible for almost half of these.

For more info: <https://www.health-e.org.za/2016/07/13/children-benefit-power-prevention-not-adults/>

Employees, particularly domestic workers report forced HIV testing

16 July 2016

According to a 2014 survey conducted among about 10 500 people by the Human Sciences Research Council for the South African National Aids Council (Sanac), about a third of South Africans living with HIV report experiencing HIV-related stigma. The study also found that around 25% of respondents who reported having lost work in the year preceding the research attributed this to HIV discrimination. In 2015, Sanac and Legal Aid South Africa opened a toll-free legal aid referral hotline to allow people to report discrimination based on their HIV or tuberculosis statuses. The Legal Aid South Africa legal support practitioner Tshepang Monare reported that employers accused of such discrimination may find themselves at the Commission for Conciliation, Mediation and Arbitration or bargaining councils, though most discrimination cases usually end up at the Labour Court. If the court finds in the employee's favour, employers may be forced to pay up to two years' wages as well as additional claims for damages.

As the hotline enters its second year, paralegals are fielding many calls, not from corporate employees but rather from those working in small companies as well as from domestic workers. South Africa's Aids Law Project won several landmark cases in support of HIV-positive people's rights. In 2010, the project closed its doors and re-emerged as the more broadly focused public interest law organisation Section 27, which trained the hotline's paralegals. According to Section27 paralegal Violet Kaseke, 6 years after the Aids Law Project closed, some employers may be smarter about disguising their discrimination, but many of the ways in which employees experience workplace HIV discrimination remain the same. She further said, domestic workers remain some of the most vulnerable to HIV workplace discrimination and this may include being tested for HIV without consent. This coerced testing usually follows an employer's offer to pay for private medical care. Having seen 3 such cases in as many months, Violet said she fears this type of discrimination may be on the rise. According to Section27 executive director Mark Heywood, the Aids Law Project succeeded in establishing a legal framework to protect people living with HIV. What it did not succeed in was ensuring that people knew their rights under the law or had access to legal representation to enforce them. He further said, the level of discrimination against people living with HIV never went away.

For more info: <http://bhekisisa.org/article/2016-07-15-employees-particularly-domestic-workers-still-report-being-forced-to-test-by-hiv>

New vigour in HIV vaccine research at AIDS 2016

19 July 2016

Pivotal South African study builds on promise of the only HIV vaccine regimen to show efficacy to date, landmark antibody trial now in field and multiple new vaccine approaches being explored. Current and forthcoming studies of vaccines to prevent HIV infection have created a new optimism that the long and challenging road to the development of such a vaccine has begun to take some promising turns. Updates on the search for preventive vaccines presented at the 21st International AIDS Conference (AIDS 2016) in Durban, South Africa, included information on advances in the development of novel vaccines and in the field of antibody mediated prevention (AMP). Participants at AIDS 2016 heard results from the HVTN 100 study conducted by the US-based HIV Vaccine Trials Network (HVTN) in partnership with South African research sites. HVTN 100 tested the immune responses of South African study volunteers to a modified version of the RV144 regimen, the only HIV vaccine regimen to show efficacy to date. The original RV144 vaccine reduced the HIV infection rate among study participants in Thailand by 31% over 3.5 years.

HVTN 100 Protocol Chair, Professor Linda-Gail Bekker, who is also Deputy Director of the Desmond Tutu HIV Centre in Cape Town and International AIDS Society President-Elect said, HVTN 100 used the same vaccines that RV144 tested but made them specific to the Clade C subtype of HIV, which is widespread in southern Africa. They also changed the adjuvant used with one of the vaccines with the

goal of eliciting a more powerful immune response and added a booster injection to prolong the period of protection. Interim results from HVTN 100, presented in the AIDS 2016 provided the green light for a Phase III efficacy trial on the modified RV144 regimen. Criteria for the go-ahead centred on the percentage of HVTN 100 vaccine-recipients who displayed a range of immune responses and the strength of those responses. In conclusion, Professor Bekker said "all the criteria were met unequivocally and in many instances the HVTN 100 outcomes exceeded both our own criteria and the immune responses seen in RV144" HVTN Principal Investigator, Dr Larry Corey elaborated that it is gratifying to see vaccines that were designed and manufactured specifically for South Africa meet and even exceed the criteria established to advance them into the large efficacy trial. HVTN 702 is a pivotal study that could lead to a licensed HIV vaccine in South Africa, the first preventive HIV vaccine worldwide.

For more info: <http://www.aids2016.org/Media-Centre/The-Latest/Press-Releases/ArticleID/62/New-vigour-in-HIV-vaccine-research-evident-at-AIDS-2016>

AFRICAN NEWS

Kenya sees dramatic rise in HIV infections

20 July 2016

The study from the Global Burden of Disease collaborative network revealed that Kenya has been cited as one of the countries with "stubborn" HIV new infections. A study has shown Kenya's rate of new HIV infections has risen steadily over the past decade more dramatically than in other countries. According to the study, more than 1.8 million Kenyans were living with HIV in 2015, and 39% were on antiretroviral therapy (ART) drugs to slow the disease's progression. The dramatic increase in new infections was undermining efforts to end the Aids epidemic by 2030. From the study, the number of new HIV infections in Kenya is rising faster than any other country in sub-Saharan Africa. Between 2005 and 2015 the number of new HIV cases grew by an average of 7% per year, one of the highest increases in the world. The number of new infections decreased over the same time period in Rwanda, Somalia and Uganda. Kenya is also one of the countries with the lowest antiretroviral coverage at 39%, below the regional average which stands at 43%. The study also indicated that despite all the high rates of new infections and the rise of people living with HIV, the number of Kenyans dying from the disease has reduced from 120 670 in 2005 to 51,700 in 2015.

Dr Nduku Kilonzo, the director of the National Aids Control Council (NACC) said. there is need for a more proactive approach in countering new HIV infections in the country. Voluntary testing and treatment is key to avoid further spread of the virus. The new infections was because the country was not doing well in testing and counselling of adolescents and that knowledge of HIV/ Aids is scattered.

For more info: <http://allafrica.com/stories/201607200029.html>

ARVs More Effective When Combined With Enhanced Prophylaxis

22 July 2016

Two studies released at the 21st AIDS Conference in Durban held in 18 to 22 July, 2016 have shown that, when anti-retroviral drugs are used in combination with other drugs to treat opportunistic infections, mortality rates in individuals infected with HIV are greatly reduced. Studies conducted in Kenya, Malawi, Uganda and Zimbabwe compared mortality rates when two different models of care were provided to adults and children who were presented for antiretroviral treatment (ART) with severely compromised immunity. Half the group (899 people) was provided with the standard level of care including ARVs and the antibiotic cotrimoxazole. The other half (906 people) received the standard treatment plus enhanced prophylaxis for bacterial

infections, tuberculosis, cryptococcal meningitis, oral/oesophageal candida and parasitic worms. In the first 24 weeks of treatment, there were 108 deaths in the group receiving standard care compared to 80 among those receiving enhanced prophylaxis. Within 48 weeks these respective figures increased to 127 and 98 deaths respectively.

Professor James Hakim of Medicine at the University of Zimbabwe College of Health Sciences said providing enhanced prophylaxis at the start of ART reduced early mortality by 25 per cent among patients with advanced HIV disease. He added that if these gains are spread across the entire treatment programme, more lives could be saved. He also informed that they are looking at saving 3 lives for every 100 patients they treat. Policy-makers should consider introducing this low-cost broad infection package for all HIV-positive patients presenting with very low CD4 counts. The study also found that viral suppression among young people decreased with age. While 71% of children aged 5 to 9 years were virally suppressed, the rate among those aged 10 to 14 years dropped to 65% and only 61% of those in the 15-19-year age group achieved viral suppression. Mhairi Maskew, Senior Researcher in the Health Economics and Epidemiology Research Office, Faculty of Health Sciences at Witwatersrand University indicated that the number of adolescents accessing HIV care is increasing, yet this group experiences poorer treatment outcomes than other age groups.

The Joint United Nations Programme on HIV and AIDS (UNAIDS) fast-track strategy seeks to ensure that 90 per cent of HIV-positive people know their status, 90 per cent are able to access ART, and 90 per cent of those on treatment attain viral suppression, by the year 2020.

For more info:<http://allafrica.com/stories/201607220002.html>

Experts list causes of sudden death in Nigeria

25 July 2016

Research conducted by some Nigerian teaching hospitals have identified stroke and heart attack as the major causes of over 93.7% of the sudden and unexpected deaths (SUD) in the country. The researchers also found that more males than females, at a ratio of 2:1 are affected and the average age of the victims is 47.3 years. They blamed the rise in SUD on rural to urban migration, increased salt and fat intake from the consumption of processed foods, increased tobacco use and sedentary lifestyle. To check the rising cases of sudden death, the medical experts called for urgent review and upgrading of critical care management facilities in the country as well as improvement upon the level of awareness, control and management of hypertension among the populace. They also recommended that Nigerians should engage in physical activities in order to protect their heart health and reduce the risk of cardiovascular disease (CVD), including heart disease and stroke.

The Guardian learnt that the Nigerian Institute of Medical Research (NIMR) Yaba, Lagos has already started a nationwide study on the rising cases of SUD even as the Federal Ministry of Health (FMoH), with support from the World Health Organisation (WHO), is planning a national survey on Non Communicable Diseases (NCDs). Investigation revealed that Nigeria does not have up-to-date national data on NCDs because the last survey was carried out over 20 years ago. However, according to the WHO country profile for Nigeria in 2014, it is estimated that NCDs account for 25% of total deaths in Nigeria. CVD is responsible for 7%; cancers 3%; diabetes 2%; chronic obstructive respiratory diseases 1% and others were responsible for 11%. Cardiologists at Lagos University Teaching Hospital (LUTH), led by Prof. Jane Ajuluchukwu and Prof. Amam Chinyere Mbakwem found that the commonest causes of sudden death are stroke (52.8%) and heart failure (40.9%). The study investigated hypertension-related acute deaths in patients admitted to the emergency room of LUTH.

For more info:<http://guardian.ng/news/experts-list-causes-of-sudden-death-in-nigeria/>

Study hints at human papillomavirus (HPV) vaccine's cancer prevention promise

4 July 2016

A new study by Canadian researchers shows that the human papillomavirus (HPV) vaccine appears to prevent abnormalities that can lead to cervical cancer. The researchers found that young women who received the vaccine through a school-based program were less likely to have such abnormalities when screened for cervical cancer than those who did not receive the vaccine. The young women were screened less than 10 years after they received their first HPV vaccine. The findings are from the province of Alberta. In 2008 Alberta introduced HPV vaccination for grade 5 girls (aged 10-11) and a three-year catch-up program for grade 9 girls (aged 14-15). The researchers reported that the program provided 3 doses of the vaccine that protects against 2 strains of HPV. Those 2 strains account for 70% of all cases of cervical cancer. The study evaluated Pap test results for more than 10 000 women, taken between 2012 and 2015. During a Pap test, cells are collected from the cervix to check for cervical cancer. The women were between 18 and 21 years old. Among those women, 56% had not received HPV vaccination. The remaining 44% had received one or more doses of the HPV vaccine through the school program. About 84% of those given the vaccine were considered fully vaccinated. That means they had three or more doses of the vaccine, the researchers noted. The study also showed that more than 16% of unvaccinated women had cervical abnormalities on a Pap test. Among women who had been fully vaccinated, the rate of cervical abnormalities was 12%.

The study author Dr. Huiming Yang and co-authors wrote, a medical officer of health and medical director of screening programs for Alberta Health Services informed that eight years after a school-based HPV vaccination program was initiated in Alberta, three-dose HPV vaccination has demonstrated early benefits, particularly against high-grade cervical abnormalities, which are more likely to progress to cervical cancer. The researchers said they hope these findings and future research leads to improved prevention efforts. They also suggested that HPV vaccination programs could be integrated with cervical cancer screening programs.

For more info: http://www.medicinenet.com/script/main/art.asp?articlekey=196787&ecd=mn1_day_070516

Study cites the fats that could shorten human life

5 July 2016

A new study by Harvard School of Public Health in Boston supports the notion that these "saturated" fats are bad. The study which followed more than 126 000 people for three decades found that people who ate higher amounts of saturated fats and trans fats died earlier than those who stuck to healthier unsaturated fats. The study authors explained that unsaturated fats include plant-based, unprocessed fats such as those found in olive, canola or soybean oil. The team of researchers led by Dr Frank Hu of Harvard School of Public Health concluded that the findings support current dietary recommendations to replace saturated fat and trans fat with unsaturated fats. One nutritionist believes the study should help clear up the confusion many consumers have about dietary fat. Sharon Zarabi, a nutritionist at Lenox Hill Hospital in New York City said there is a common misconception that eating dietary fat makes you gain body fat. It is important to analyze what you are eating, are they hydrogenated fats coupled with refined carbohydrates, (for example, white bread) or are they unsaturated from plant sources?

In the new study, Dr Hu's team used data from 2 ongoing studies involving United States nurses and health professionals whose diets and health were tracked over decades. Participants' dietary fat intake was assessed at the start of the study and then every 2 to 4 years. Their diet and health were then followed for up to 32 years. During the follow-up, more than 33 300 of the participants died. It was reported that eating

more saturated fat and trans fat was associated with a higher risk of death during the study. For example, the researchers found that for every 2% rise in trans fat intake, there was a 16% higher odds of dying during the study period. The study authors noted that trans fats are an especially unhealthy form of dietary fat that are gradually being phased out of the American food supply. The findings showed that, likewise, every 5% increase in saturated fat intake was tied to an 8% rise in risk of dying during the study period. However, the opposite was true with plant-based unsaturated fats. In that case, eating high amounts of polyunsaturated or monounsaturated fats was linked to an 11% to 19% reduction in death risk during the study period.

For more info: <https://www.tgh.org/news/healthday/study-cites-fats-could-shorten-your-life>

Innovative trials produce promising breast cancer drugs

7 July 2016

An innovative set of clinical trials have identified two drugs that could provide a fighting chance for women with advanced breast cancer. Researchers reported that the drugs, neratinib and veliparib both appear effective in helping women diagnosed with stage 2 or 3 breast cancer. One of the study authors, Dr. Laura Esserman who is the director of breast cancer care at the University of California, San Francisco's Comprehensive Cancer Center said these are the first two drugs to come out of the I-SPY clinical trials, a research effort intended to streamline drug testing by better guiding treatments to those who would most benefit from them. She further explained that, the I-SPY clinical trials use genetic information from patients to steer them to experimental drugs that are most likely to work. The results revealed that neratinib halted the spread of cancer in 56% of women with HER2-positive, hormone-receptor-negative breast cancer, compared with 33% of a control group receiving standard chemotherapy alone. Veliparib stopped the spread of cancer in 51% of women with triple-negative breast cancer, compared to 26% in the chemo-only control group. Dr Esserman added that the trials also use adaptive design, a process in which doctors use early data from current patients to steer treatment for the next patients in line. For example, a patient might be given a different drug in the trial that is working better in women with her particular type of breast cancer. The whole idea of the framework is to allow more innovativeness and thoughtfulness and to drive faster to combinations that might make a huge difference in the response to these agents in women who need them most.

Dr Otis Brawley, chief medical officer for the American Cancer Society said, adaptive design is the wave of the future for clinical trials of cancer drugs. Genetic research has provided a bevy of new ways to attack cancer by finding very specific targets against which different drugs can be utilized. Unfortunately, traditional clinical trial design cannot keep up with the pace of genetic revelations concerning cancer. He also noted that in the I-Spy trials researchers are using a 70-gene panel to help determine which drugs might be right for which breast cancer patients. Testing each gene or combination of genes with individual drugs would be costly and time-consuming. He highlighted that, the real aim is to use the smallest number of people in the shortest period of time to figure out if a drug works. It is especially important to do that as they learn that the number of diseases that are going to be tested these drugs on is increasing exponentially as they better understand and define cancer genomically (based on genes).

For more info: <http://news.healingwell.com/index.php?p=news1&id=712659>

9 out of 10 strokes could be prevented

15 July 2016

A new study that involved nearly 27000 people from every continent find out that although the vast majority of strokes are preventable, it is a leading cause of death and disability. The researchers discovered that 10 controllable risk factors account for 90% of all strokes worldwide. Of these modifiable risk factors, high blood pressure (hypertension) is the most important. The study co-leader Dr Martin O'Donnell who is an associate clinical professor in the Population Health Research Institute at McMaster University in Hamilton, Canada

and the HRB-Clinical Research Facility in Galway, Ireland said, the study confirms that hypertension is the most important modifiable risk factor in all regions and the key target in reducing the burden of stroke globally. The researchers mentioned that preventing strokes is a major public health priority and strategies for reducing people's risk should be based on key preventable causes of stroke. Dr O'Donnell explained this study is of an adequate size and scope to explore stroke risk factors in all major regions of the world, within key populations and within stroke subtypes. The findings showed that the researchers looked at the proportion of strokes caused by specific risk factors to determine the extent to which eliminating each risk would reduce the impact of stroke. Eliminating high blood pressure was estimated to reduce risk by nearly 48%.

The investigators also calculated potential reductions for eliminating other risk factors: Physical inactivity 36%, Poor diet 23%, Obesity 19%, Smoking 12%, Heart causes 9%, Diabetes 4%, Alcohol use 6%, Stress 6% and Lipids (blood fats) 27%. The combined reduction for all 10 risk factors was 90.7% across all regions, age groups and among both men and women. The study authors noted, however that the importance of various risk factors vary in different regions. For example, high blood pressure causes about 39% of strokes in North America, Australia and western Europe, but nearly 60% in Southeast Asia. According to study co-leader Dr Salim Yusuf, the findings will inform the development of global population-level interventions to reduce stroke and how such programs may be tailored to individual regions, as they did observe some regional differences in the importance of some risk factors by region. He is a professor of medicine and executive director of the Population Health Research Institute at McMaster University.

For more info: <https://www.tgh.org/news/healthday/9-out-10-strokes-could-be-prevented-study-finds>

Mixed Progress in Worldwide Fight Against HIV/AIDS

19 July 2016

A new study found out that, although the number of HIV/AIDS deaths worldwide each year has fallen since peaking in 2005, the number of new HIV infections is up in 74 countries. Deaths from HIV/AIDS fell to 1.2 million in 2015 from 1.8 million in 2005. Though the number of new HIV infections has decreased since a peak of 3.3 million in 1997, it has been relatively stable at about 2.5 million a year for the past decade. Worldwide, new HIV infections fell just 0.7% a year between 2005 and 2015, compared to 2.7% a year between 1997 and 2005. Sub-Saharan Africa continued to be a trouble spot, accounting for three-quarters of new HIV infections (1.8 million) in 2015. South Asia had 8.5% (212,500) of new infections; southeast Asia, 4.7% (117,500); and east Asia, 2.3% (57,500) in 2015. Between 2005 and 2015, the percentage of people with HIV who were receiving antiretroviral therapy rose sharply from 6.4% to more than 38% among men, and from 3.3% to 42% among women. Still, most countries remain well short of the United Nations' target for 81% of people with HIV to be getting antiretroviral therapy by 2020. However, researchers noted that 4 countries are close: Sweden with 76% and the United States, Netherlands and Argentina at about 70%.

Professor Haidong Wang, the study lead author and , in a journal news release and an assistant professor of global health at the University of Washington Institute for Health Metrics and Evaluation said, although scale-up of antiretroviral therapy and measures to prevent mother-to-child transmission have had a huge impact on saving lives, their new findings present a worrying picture of slow progress in reducing new HIV infections over the past 10 years. The institute's director, Professor Christopher Murray mentioned that development assistance for HIV/AIDS is stagnating and health resources in many low-income countries are likely to plateau over the next 15 years. In conclusion he highlighted that, a massive scale-up of efforts from governments and international agencies will be required to meet the estimated \$36 billion needed every year to realize the goal of ending AIDS by 2030, along with better detection and treatment programs and improving the affordability of antiretroviral drugs.

For more info: http://www.medicinenet.com/script/main/art.asp?articlekey=197100&ecd=mnl_day_071916

Even a Little Exercise May Help Younger Women's Hearts

25 July 2016

A new study conducted at Baltimore, Maryland in the United States suggests that younger women who exercise just 2.5 hours a week may cut their risk for heart disease by up to 25%. Dr. Erin Michos, an associate professor of medicine and epidemiology at Johns Hopkins School of Medicine in Baltimore said, "the habits and the choices we make in the first half of our life determine our well-being and freedom from chronic disease in the second half of our lives. He added that, importantly, higher levels of physical activity have been shown to be associated with reduction in rates of heart disease, stroke, cancers, diabetes and many other chronic health conditions.

Lead researcher Andrea Chomistek, an assistant professor of epidemiology and biostatistics at Indiana University's School of Public Health said women can achieve the recommended 150 minutes of moderate-to-vigorous physical activity per week in as many or as few sessions as they wish. Joining a gym or walking or bicycling or any other moderate activity that one enjoys can be enough to reduce risk of heart disease. She also thinks that men too can achieve a similar benefit with a few hours a week of moderate exercise, though further research would be needed. She further advised that it is important for normal-weight, overweight and obese women to be physically active. For people who are currently inactive and find joining a gym intimidating, emphasizing the benefits of walking may help them get active. Data on more than 97000 women, aged 27 to 44, who took part in the Nurses' Health Study 2 was collected for the study. Specifically, the researchers looked at the frequency, amount of time, intensity and type of preferred physical activity in which the women participated. During 20 years of follow-up 544 women developed heart disease. They found that women who were the most physically active during their leisure time had the lowest risk for heart disease, 25% lower than women who exercised the least. Researchers found out exercise didn't have to be strenuous. In fact, moderate exercise such as taking a brisk walk was associated with a lower risk of heart disease. However, the study did not prove a cause-and-effect link between the two.

For more info: http://info.emergencehealthnetwork.org/poc/view_doc.php?type=news&id=182972&cn=176

Sharing drug 'snorting straws' spreads hepatitis C

27 July 2016

A new study conducted by the University of Tennessee Medical Center warned that the sharing straws to snort opioids is a major cause of hepatitis C infection and that could also lead to the transmission of other blood-borne diseases such as HIV, the AIDS-causing virus. Study leader Dr Craig Towers, a maternal-fetal medicine specialist said, this is a worldwide issue that needs to be addressed. He further said, "the idea that 'if you snort, don't share straws' needs to be communicated around the globe as the use of snorting straws for drug use is a common practice, especially for those that prefer that method over intravenous drug use". The researchers surveyed 189 pregnant women in eastern Tennessee who were infected with hepatitis C virus. Pregnant women were chosen for the study because they are highly likely to use health care services. 70% of the women said they did not know how they became infected with hepatitis C and nearly that many learned they were infected through routine prenatal testing. 92% of them said they had shared snorting straws. He reported that nearly all participants reported that opiates were the primary drug that was snorted.

Dr Towers further mentioned that the study supports previous reports of the overwhelming existence of an "opioid epidemic," especially in Appalachia. The main concern is the transmission of any blood-borne virus, but a huge potential impact of the sharing of snorting utensils is the threat of transmitting HIV which is more serious than hepatitis. If HIV were to enter the blood pool of this population, an increase in this serious infection might also develop. Dr Towers concluded that, the risk needs to be communicated to the public and the health care community.

For more info: <http://www.health.com/news/sharing-drug-snorting-straws-spreads-hepatitis-c>

Cancer now leading killer in 12 European nations

15 August 2016

A new study reported that cancer has overtaken heart disease and stroke as the leading cause of death in 12 European countries. However, cardiovascular disease (heart disease and stroke) is still the leading cause of death worldwide, killing more than 17 million people a year, according to the study. The researchers said, in the 53 countries defined as the European region by the World Health Organization, heart disease killed more than 4 million people in 2016. Those deaths accounted for 45% of all deaths in those nations. Cancer accounted for less than half the number of deaths from heart disease in Europe as a whole. However, success in preventing and treating heart disease seems to have led to large declines in heart disease deaths in a number of countries. The study showed that cancer now kills more men than heart disease in these 12 countries: Belgium, Denmark, France, Israel, Italy, Luxembourg, the Netherlands, Norway, Portugal, Slovenia, Spain and the United Kingdom. The study also found that cancer now kills more women than heart disease in Denmark and Israel.

In a journal news release, the study leader, Dr Nick Townsend said these figures highlight the wide inequalities between European countries in deaths from heart disease and stroke. He is a senior researcher at the British Heart Foundation Centre on Population Approaches for Non-Communicable Disease Prevention at the University of Oxford in England. He noted that the countries where cancer caused more death than heart disease were all found in Western Europe. In contrast Dr Townsend said, the highest numbers of deaths from heart disease and stroke still tend to be seen in Eastern European countries. Although progress have seen across Europe in the prevention and treatment of [heart disease and stroke], leading to decreases in mortality from it, it is clear that such progress is not consistent across the continent. More research is needed into why some countries are showing improved outcomes, while others are not. Data must be collected and compared between countries so that health professionals and national governments can target interventions more effectively to reduce inequalities.

For more info: <http://www.k5thometeam.com/story/32760072/cancer-now-leading-killer-in-12-european-nations>

RECENT PUBLICATIONS

Availability and quality of routine morbidity data: Review of studies in South Africa

DOI: <http://dx.doi.org/10.1093/jamia/ocw075>

ABSTRACT

Objectives

Routine health information systems (RHISs) provide data that are vital for planning and monitoring individual health. Data from RHISs could also be used for purposes for which they were not originally intended, provided that the data are of sufficient quality. For example, morbidity data could be used to inform burden of disease estimations, which serve as important evidence to prioritize interventions and promote health. The objective of this study was to identify and assess published quantitative assessments of data quality related to patient morbidity in RHISs in use in South Africa.

Materials and Methods

A review of literature published between 1994 and 2014 that assessed the quality of data in RHISs in South Africa was conducted. World Health Organization (WHO) data quality components were used as the assessment criteria.

Results

Of 420 references identified, 11 studies met the inclusion criteria. The studies were limited to tuberculosis and HIV. No study reported more than 3 WHO data quality components or provided a quantitative assessment of quality that could be used for burden of disease estimation.

Discussion

The included studies had limited geographical focus and evaluated different source data at different levels of the information system. All studies reported poor data quality.

Conclusion

This review confirmed concerns about the quality of data in RHISs and highlighted the need for a comprehensive evaluation of the quality of patient-level morbidity data in RHISs in South Africa.

For more info: <http://jamia.oxfordjournals.org/content/early/2016/06/28/jamia.ocw075>

Empagliflozin and progression of kidney disease in type 2 diabetes

2016DOI: 10.1056/NEJMoa1515920

BACKGROUND

Diabetes confers an increased risk of adverse cardiovascular and renal events. In the EMPA-REG OUTCOME trial empagliflozin, a sodium–glucose cotransporter 2 inhibitor reduced the risk of major adverse cardiovascular events in patients with type 2 diabetes at high risk for cardiovascular events. They study aimed to determine the long-term renal effects of empagliflozin, an analysis that was a prespecified component of the secondary microvascular outcome of that trial.

METHODS

Patients with type 2 diabetes and an estimated glomerular filtration rate of at least 30 ml per minute per 1.73 m² of body-surface area to receive either empagliflozin (at a dose of 10 mg or 25 mg) or placebo once daily were randomly assigned. Prespecified renal outcomes included incident or worsening nephropathy (progression to macroalbuminuria, doubling of the serum creatinine level, initiation of renal-replacement therapy, or death from renal disease) and incident albuminuria.

RESULTS

Incident or worsening nephropathy occurred in 525 of 4124 patients (12.7%) in the empagliflozin group and in 388 of 2061 (18.8%) in the placebo group (hazard ratio in the empagliflozin group, 0.61; 95% confidence interval, 0.53 to 0.70; P<0.001). Doubling of the serum creatinine level occurred in 70 of 4645 patients (1.5%) in the empagliflozin group and in 60 of 2323 (2.6%) in the placebo group, a significant relative risk reduction of 44%. Renal-replacement therapy was initiated in 13 of 4687 patients (0.3%) in the empagliflozin group and in 14 of 2333 patients (0.6%) in the placebo group, representing a 55% lower relative risk in the empagliflozin group. There was no significant between-group difference in the rate of incident albuminuria. The adverse-event profile of empagliflozin in patients with impaired kidney function at baseline was similar to that reported in the overall trial population.

CONCLUSIONS

In patients with type 2 diabetes at high cardiovascular risk, empagliflozin was associated with slower progression of kidney disease and lower rates of clinically relevant renal events than was placebo when added to standard care.

For more info: <http://www.nejm.org/doi/full/10.1056/NEJMoa1515920>

Physical activity and risk of breast cancer, colon cancer, diabetes, ischemic heart disease, and ischemic stroke events: systematic review and dose-response meta-analysis for the Global Burden of Disease Study 2013

Citation: *BMJ* 2016;354:i3857

ABSTRACT

OBJECTIVE

To quantify the dose-response associations between total physical activity and risk of breast cancer, colon cancer, diabetes, ischemic heart disease, and ischemic stroke events.

DESIGN

Systematic review and Bayesian dose-response meta-analysis.

DATA SOURCES

PubMed and Embase from 1980 to 27 February 2016 and references from relevant systematic reviews. Data from the Study on Global AGEing and Adult Health conducted in China, Ghana, India, Mexico, Russia and South Africa from 2007 to 2010 and the US National Health and Nutrition Examination Surveys from 1999 to 2011 were used to map domain specific physical activity (reported in included studies) to total activity.

ELIGIBILITY CRITERIA FOR SELECTING STUDIES

Prospective cohort studies examining the associations between physical activity (any domain) and at least one of the five diseases studied.

RESULTS

174 articles were identified: 35 for breast cancer, 19 for colon cancer, 55 for diabetes, 43 for ischemic heart disease and 26 for ischemic stroke (some articles included multiple outcomes). Although higher levels of total physical activity were significantly associated with lower risk for all outcomes, major gains occurred at lower levels of activity (up to 3000-4000 metabolic equivalent (MET) minutes/week). For example, individuals with a total activity level of 600 MET minutes/week (the minimum recommended level) had a 2% lower risk of diabetes compared with those reporting no physical activity. An increase from 600 to 3600 MET minutes/week reduced the risk by an additional 19%. The same amount of increase yielded much smaller returns at higher levels of activity: an increase of total activity from 9000 to 12 000 MET minutes/week reduced the risk of diabetes by only 0.6%. Compared with insufficiently active individuals (total activity <600 MET minutes/week), the risk reduction for those in the highly active category (≥ 8000 MET minutes/week) was 14% (relative risk 0.863, 95% uncertainty interval 0.829 to 0.900) for breast cancer; 21% (0.789, 0.735 to 0.850) for colon cancer; 28% (0.722, 0.678 to 0.768) for diabetes; 25% (0.754, 0.704 to 0.809) for ischemic heart disease; and 26% (0.736, 0.659 to 0.811) for ischemic stroke.

CONCLUSIONS

People who achieve total physical activity levels several times higher than the current recommended minimum level have a significant reduction in the risk of the five diseases studied. More studies with detailed quantification of total physical activity will help to find more precise relative risk estimates for different levels of activity.

For more info: <http://www.bmj.com/content/354/bmj.i3857>

UPCOMING EVENTS

World Nutrition Congress

30th August – 2nd September 2016

University of the Western Cape will host the World Nutrition Conference 2016 from the 30 August to 2 September 2016. The global experts and thought leaders in the fields of Public Health, Nutrition and Food Systems will meet in Cape Town for the 2nd edition of the World Public Health Nutrition Association's (WPHNA) World Nutrition Congress. Researchers, policymakers and advocates will take to the stage to discuss, debate and share insights on how to address the double burden of malnutrition in a globalised world.

For more info: <http://us13.campaignarchive2.com/?u=0f59e853fe8fdea431cd4c948&id=73f59ccc64&e=eb21b0c12b>

6th International Conference on Healthcare, Nursing and Disease Management (HNDM)

21st -22nd October 2016

Hong Kong will host the 6th International Conference on Healthcare, Nursing and Disease Management to be held on the 21st and 22nd October 2016 at Hong Kong.

For more info: <http://iaphlsr.org/6th-international-conference-on-healthcare-nursing-and-disease-management-hndm-21-22-oct-2016-hong-kong-about-10>

REMINDER: 10th Vaccine Congress

4th - 7th September 2016

The 10th Vaccine Congress will be held at Amsterdam, Netherlands from the 4th to 7th September 2016. The topics are as follows: vaccine safety; clinical studies and field trials; vectors/adjuvants/drug delivery; production/manufacturing; regulatory/societal economic/programmatic/legislation subjects; immunology/animal models; virus and VLP bio processing; human vaccines-infectious and non-infectious diseases and veterinary vaccines.

For more info: <http://www.vaccinecongress.com/>