Family Resource Centre

Newsletter

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Poverty linked to early ageing

Genetics, environment and lifestyle all play a role in how well we age, but a new study from Denmark shows that one's financial situation is also important.

Research from the Center for Healthy Ageing and the Department of Public Health indicates that four or more years with an income level below the relative poverty threshold during adult life can make a significant difference in when the body starts to show signs of ageing. For the study, researchers looked at 5,500 middle-aged participants, looking at markers of ageing: physical capability, cognitive function and levels of inflammation. Results were then compared with the income of the participants over the 22 years prior to the study. An annual income of 60 percent below the median income is considered relative poverty.

Findings showed a significant correlation between financial challenges and early ageing. Dr. Rikke Lund, co-author of the study, feels this is important in order to try to launch preventative measures. "Early ageing also means more treatment at an earlier age, and it is a burden both to the individual and the society. With our results, we show that poor finances are a strong indicator of early ageing—this knowledge can be used to prevent the problems."

"Many people do not necessarily experience any noticeably poorer physical capability until they are growing older and are therefore not aware their bodies have begun to age prematurely. This means that there will be no focus on preventative measures until it is too late."

Participants underwent cognitive and physical tests, each of which demonstrates general strength and function. Grip strength, how many times they could get up from and sit on a chair in 30 seconds, and how high they could jump were all tests performed. Cognitive testing involved memorizing sequences.

"There is a significant difference between the test results. People who have been below the relative poverty threshold for four or more years in their adult life perform significantly worse than those who have never been below the threshold," Lund said. The financially challenged group showed reduced grip strength and was able to rise and sit on average two times less in 30 seconds than the more financially stable group. People in the financially challenged group also showed higher levels of inflammatory markers in their blood, which indicates the body is in a state of alert and is often used as a marker to indicate ageing and illness.

"The results draw a picture that groups which experience serious financial challenges several times in their adult lives age earlier than others. From a broader perspective, the results may inspire a reconsideration of the politically adopted reduced rates of public benefits," Lund said.

Source: Psych Central. University of Copenhagen, Faculty of Health and Medical Sciences. psychcentral.com/news/2019/09/29/long-bouts-of-poverty-linked-to-early-ageing

Inside this issue:

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Callers in crisis will be referred to the crisis line

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Choosing worry over relaxing

Researchers at Penn State University have found that people with anxiety may actively resist relaxation and instead continue to worry in order to avoid a large jump in anxiety in the event that something "bad" does happen. The new study showed that people who were more sensitive to changes in negative emotion—quickly moving from a relaxed state to fear, for example—were also more likely to feel anxious while being led through a series of relaxation exercises.

Michelle Newman, professor of psychology, said the results could benefit people who experience "relaxation-induced anxiety." This phenomenon occurs when people actually become more anxious during relaxation training. "People may be staying anxious to prevent a large shift in anxiety, but it's actually healthier to let yourself experience those shifts," she said. "The more you do it, the more you realize you can do it and it's better to allow yourself to be relaxed at times. Mindfulness training and other interventions can help people let go and live in the moment."

The study also focuses on why relaxation treatments, designed to help people feel better, can actually potentiate more anxiety. "People who are more vulnerable to relaxation-induced anxiety are often the ones with anxiety disorders who may need relaxation more than others," said Hanjoo Kim, a grad student at Penn State. "These relaxation techniques were meant to help, not make someone more anxious. Our findings will hopefully serve as a cornerstone for providing better care for these populations."

Researchers have been aware of relaxation-induced anxiety since the 1980s, but the cause has not been known. When Newman developed the contrast avoidance theory in 2011, she thought the two problems may be connected. "The theory revolves around the idea that people may make themselves anxious intentionally as a way to avoid the letdown they might get if something bad were to happen. This isn't actually helpful and just makes you more miserable. But, because most of the things we worry about don't' end up happening, what's reinforced in the brain is, 'I worried and it didn't happen so I should continue worrying.'"

Researchers took 96 college students, 32 with generalized anxiety disorder (GAD), 34 with major depressive disorder (MDD), and 30 "controls" with neither disorder. On arrival to the lab, researchers led the participants through relaxation exercises before having them watch videos designed to elicit fear or sadness. Participants then answered questions to measure how sensitive they were to changes in their emotional state. As an example, some people could be uncomfortable with negative emotions produced by the videos right after relaxing, and others could find the relaxation session helpful in dealing with those emotions.

Next, participants were led through a relaxation session once more prior to filling out a second survey designed to measure the level of anxiety during the second relaxation session.

After looking at the data, researchers found that people with GAD were more likely to be sensitive to sharp spikes in emotion, such as moving from feeling relaxed to being stressed or frightened. This sensitivity was also linked to feeling anxious during sessions intended to induce relaxation.

Similar effects were found in people with MDD, although the results were less pronounced. It is hoped that these results will lead to better care for people suffering with anxiety. "Measuring relaxation-induced anxiety and implementing exposure techniques targeting the desensitization of negative contrast sensitivity may help patients reduce this anxiety. Also, it would be important to examine relaxation-induced anxiety in other disorders, such as panic disorder and persistent mild depression."

Source: Penn State. "People with anxiety may strategically choose worrying over relaxing." ScienceDaily. www.sciencedaily.com/releases/2019/09/190930114737.htm

Political events and mental health

A doctor has published a case history in *BMJ Case Reports* about a patient he treated after a brief episode of acute psychosis triggered by the 2016 referendum in the UK on Brexit—the process of the UK leaving the European Union (EU). Politics in general these days has become very intense for many people, and effects on mental health are not unexpected. People already psychologically vulnerable are particularly at risk, he suggests.

The doctor describes a case where a middle-aged man was brought to hospital by paramedics in an acute psychotic state, about three weeks after the June 2016 referendum result deciding the UK's departure from the EU.

The patient was agitated and confused, with disordered speech and thoughts. He was hearing voices and was delusional. He was also paranoid, believing that people were spying on him and planning to kill him, and that radio and television discussions were directed to him.

His wife explained that since the referendum result, the man had found it increasingly difficult to come to terms with the political events happening around him, and was also increasingly worried over racially motivated incidents and was having trouble sleeping.

Despite being prescribed medication to help alleviate his insomnia and agitation, his mental health continued to spiral downwards to the point that he needed hospital treatment.

He was admitted to a psychiatric ward, given lorazepam to help calm him down and was prescribed an antipsychotic (olanzapine) for about three weeks.

The man made a full recovery and was discharged after two weeks in hospital, and has remained well up to his last check-up in June of 2019.

Prior to the referendum, he had experienced some work and family pressures, which may have contributed to his declining mental health. Although this is just one case that applies to specific circumstances, precipitating stressful life events occur in up to half of people diagnosed with an acute bout of psychosis.

Political events can be a source of significant psychological stress, with many US surveys in the aftermath of the 2016 election showing that about two-thirds of respondents identified the country's future as a significant stressor, and over 50 percent reported feeling stressed by the existing political climate. Similar studies done in the UK after the referendum showed that Brexit was a major source of anxiety among young people.

Those who may already be predisposed to mental illness may be particularly vulnerable. In this case, the man had experienced a very brief psychotic episode 13 years earlier, related to work stress. The episode was much less severe and he recovered in a couple of days, but it suggests he may have had a psychological vulnerability.

Identifying the early warning signs of acute and transient psychotic episodes, especially during stressful times, is important to ensure quick treatment and early recovery—factors that are associated with a better long term outlook.

Source: BMJ. "Acute psychotic illness triggered by Brexit Referendum: Political events can take major toll on mental health, a doctor warns." ScienceDaily. www.sciencedaily.com/releases/2019/10/191001184925.htm

Sleeping pills reduce suicidal thoughts in patients with severe insomnia

Insomnia is considered a driver of suicide, and people with severe insomnia may safely benefit from taking a sedative to help address their sleep difficulties as it reduces their suicidal thoughts, researchers from the Medical College of Georgia at Augusta University report.

"If you have a patient who complains that their sleep has taken a turn for the worse then there is reason to open the door to a question about suicide," says Dr. Vaughn McCall, Department of Psychiatry and Health Behavior at Augusta University. "If your patient says their sleep problem is really bad and they have had thoughts of killing themselves, maybe they should have a targeted treatment for their insomnia." More than 30 studies have linked suicidal thoughts or actions to insomnia, but risk of suicide and prevention are mostly overlooked in treating insomnia, says McCall, an expert in insomnia, depression and suicide.

He is hopeful that REST-IT—Reducing Suicidal Ideation Through Insomnia Treatment—the first clinical trial looking at whether targeted insomnia treatment reduces suicide risk, will help change that.

"While the results do not argue for the routine prescription of hypnotics for mitigating suicidal ideation in all depressed patients with insomnia, they suggest that co-prescription of a hypnotic drug during initiation of an antidepressant may be beneficial in suicidal outpatients, especially in patients with severe insomnia."

The study, at MCG, Duke University and the University of Wisconsin, included 103 participants ages 18 to 65 with major depressive disorder, insomnia and suicidal thoughts. Thirty percent had a prior suicide attempt, but patients with an active and imminent plan to commit suicide were excluded out of concern for their safety since it was an outpatient study, McCall noted.

All participants took an antidepressant for the duration of the trial (8 weeks), and half also took the sedative-hypnotic zolpidem at bedtime. Regular self-reports were completed by participants covering the severity of their insomnia and how many times they woke during the night and hours of sleep obtained.

Researchers measured distorted thoughts about sleep, such as people thinking they would never have a good night's sleep again, which McCall had previously found to be a risk factor for suicide. Frequency and intensity of nightmares or disturbing dreams were also recorded. Patients wore a wrist device to keep up with rest/activity cycles. Severity of depression was assessed by staff at each study visit and participants also completed the Beck Hopelessness Scale, measuring pessimism and negative expectations, considered a predictor of suicidal behaviour in adults and adolescents.

Those taking the sleep aid showed significant immediate and long-term improvement in the severity of their insomnia. Both groups reported substantial improvement in feelings about quality of life, hopelessness, nightmares etc., and related insomnia and suicidality, the group taking the sleep aid showed a greater reduction in suicidal thinking. The sleep aid was most effective in patients with the most severe insomnia. There were no deaths or suicide attempts for the duration of the study.

Researchers noted the safety of using narcotics in patients with suicidal thoughts and the fact that participants followed protocol very well overall. Hypnotics are a common means to commit suicide, and there are concerns about people becoming dependent on them. Participants were restricted to a one-week-supply of the medication until their suicidal thoughts began to decrease, and the sleep aid was removed entirely after the eight week period. After the initial study period, patients continued to improve or remained stable. Two weeks after the conclusion of the study, both groups of patients maintained progress with reduced depression scores and suicidal thoughts. McCall considered the possibility that the extra attention received over the course of the study resulted in increased benefit for all of the participants.

While death rates from medical illnesses such as cancer have decreased over the past decade, deaths by suicide have increased 31 percent in the US from 2001 to 2017, and is now among the leading causes of death in the US according to the National Institute of Mental Health. Major depression is one of the most common mental health disorders in the world, and many people suffer insomnia with the illness. Insomnia drastically increases the risk of depression and vice versa, and both increase risk of suicide.

Source: Medical College of Georgia at Augusta University. "Sleeping pills reduce suicidal thoughts in patients with severe insomnia." ScienceDaily. www.sciencedaily.com/releases/2019/09/190930180945.htm

In Russia, declines in alcohol consumption and mortality in lock-step

A review of statistics in Russia has shown that the significant decline in overall alcohol consumption since the early 2000s has a parallel steep decline in the country's mortality rates too.

A significant portion of the alcohol reduction is due to economic factors, evolving patterns of alcohol consumption, and government policies. Today, life expectancy for men and women is 6.1 and 4.7 years longer, respectively, than it was in 1980, with alcohol consumption patterns playing a disproportionate role.

"Alcohol use has been established as one of the main contributors, if not the main contributor, to Russian mortality," the authors note, led by Maria Neufeld of the Moscow Research Institute of Psychiatry. She also works with the Institute of Clinical Psychology and Psychotherapy at Dresden Technical University in Germany.

Researchers looked at a number of sources to study the relationship between mortality, alcohol use, government policies and social trends. These included the Russian Fertility and Mortality database to retrieve data on death rates and cause of death, as well as deaths often related to drinking such as suicide and homicide. The Russian Statistical Service provided data on life expectancy broken down by sex and beer sales. Alcohol consumption rates were determined using a technique developed by Alexander Nemtsov, of the Moscow Research Institute of Psychiatry, lead author of the paper.

Neufeld and colleagues observed three "waves" over time in which drinking and mortality dropped together. The first, between 1985 and 1987, corresponded with Mikhail Gorbachev's anti-alcohol campaign of the 80s. Shortly after repeal of those measures in 1991, life expectancy again fell while alcohol consumption, especially of illegal vodka, increased.

The second wave, from 1995 to 1998, life expectancy grew as the economy sputtered and alcohol consumption declined. But starting in 1998, purchasing power grew in Russia, as did the frequency of drinking and the life expectancy decreased again.

The third wave, starting in 2003 and continue to present day, was affected by government policies aimed at alcohol consumption. These included greater restriction on hours of sale, and locations in which alcohol can be sold, increases in minimum pricing and taxes, stricter licensing and prohibitions on public drinking. At the same time, Russian drinking patterns shifted away from vodka somewhat and toward beer.

The study cannot prove that the decrease in alcohol consumption directly led to improved life expectancy, but the link appears strong, waxing and waning in tandem over a considerable time period. "Trends in estimated total alcohol consumption and official alcohol sales strongly correspond with the observed shifts in mortality," the authors conclude.

William Pridemore, of the School of Criminal Justice at SUNY Albany, agrees that regulations are effective, but that the overall narrative is complex. "Alcohol policies also may be rooted in culture or a zeitgeist that affects health outcomes independent of regulations. For example, a developing nation with high consumption enacts alcohol regulations, but also enacts other health-related policies, and goes through demographic transition, and experiences economic growth. The amount and type of regulations are driven by social forces, some of which might also influence health via other mechanisms. Alcohol policy is effective in reducing harm, but is embedded in a complex network of social, political and economic forces that make it difficult to discern its precise effects."

Source: Journal of Studies on Alcohol and Drugs. "In Russia, declines in alcohol consumption and mortality have gone hand in hand." ScienceDaily. www.sciencedaily.com/releases/2019/10/191003074839.htm

Now, for something completely different……

Want to avoid a cold? Try a tattoo, or twenty….

Research from three Alabama scholars suggests that receiving multiple tattoos can strengthen the body's immunological responses, potentially making you stronger in fighting off common infections.

It should be noted that getting one tattoo can, temporarily, lower your resistance to infections, says Dr. Christopher Lynn, University of Alabama associate professor of anthropology. Lynn said he noted from personal experience that getting a tattoo can be physically draining. "They don't just hurt while you get the tattoo, but they can exhaust you. It's easier to get sick. You can catch a cold because your defenses are lowered from getting a tattoo."

Think of exercising when you are out of shape. "After the stress response, your body returns to an equilibrium," says Lynn. "However, if you continue to stress your body over and over again, instead of returning to the same set point, it adjusts its internal set points and moves higher."

Lynn hypothesized that repeated tattooing might have the same benefit. Research results from Lynn's team, including Johnna Dominguez and Dr. Jason DeCaro, backed up the premise.

Dominguez sought out volunteers at local tattoo businesses, and surveyed them, obtaining information on the number of tattoos received and time involved in the procedures themselves. Saliva samples were obtained before and after their tattoo was performed. Samples were analyzed to measure the levels of Immunoglobulin A (IgA), an antibody that lines portion of our gastrointestinal and respiratory systems, and cortisol, a stress hormone known to suppress immune response.

"Immunoglobulin A is a front line defense against some of the common infections we encounter, like colds," said Lynn. Levels of IgA dropped significantly in those receiving initial tattoos, as would be expected due to the immunosuppressive actions of cortisol, responding to the stress of tattooing. However, the IgA decrease was less so among those receiving tattoos more frequently.

When getting a tattoo, the body mobilizes immunological agents to fight possible infections at the site of the tattoo. A body that is repeatedly tattooed ratchets up the threshold that would require an immunological response, indicating the body is getting stronger immunologically.

How did Lynn get interested in the effect of multiple tattoos on the body? "I'm interested in neuroanthropology, or how culture gets into the body at the neurological level," said Lynn. "Many of the things I study have a catchy quality to them. It's a concept I actually borrowed from my study of religion. Catch students' attention and get them interested in anthropology. Blow their minds a bit, then get them to dig deeper. The trick is to find ways to study catchy concepts that are actually important. Nobody had done anything like this tattooing study, looking at the potential benefits from a biological perspective."

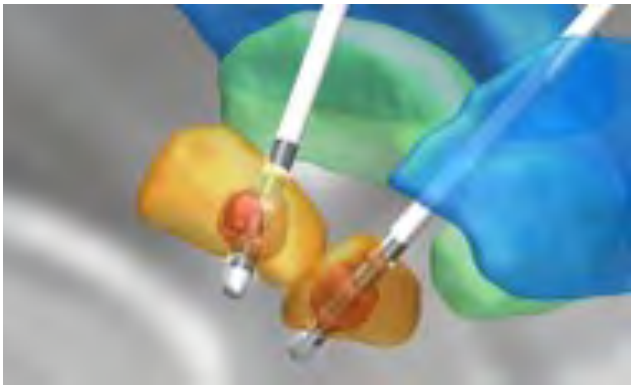
Source: University of Alabama. "Want to avoid a cold? Try a tattoo or twenty, says researcher." ScienceDaily. www.sciencedaily.com/releases/2016/03/160308110004.htm

DBS effective treatment for most severe form of depression

A study published in the *American Journal of Psychiatry* showed that deep brain stimulation (DBS) in the subcallosal cingulate (SCC) area of the brain—Area 25—produced a strong antidepressant effect that is sustained over a long period of time for patients suffering with treatment resistant depression—the most severely depressed patients who have not responded to other forms of treatment.

DBS is currently approved to treat essential tremor, Parkinson's disease, epilepsy and obsessive-compulsive disorder. It is a neurosurgical procedure involving the placement of a neurostimulator that sends high-frequency electrical impulses through implanted electrodes deep in the brain to specific brain areas responsible to the symptoms of each disorder. Earlier trials using DBS for treatment-resistant depression, although proving that there was clinical benefit, were often halted due to lack of statistically significant antidepressant effect at the six-month point.

"Despite the fact that larger trials were halted early, what my colleagues and I were seeing as we continued to follow patients from our initial trials was that over time, they were getting better and not only that, they were staying better. So we stayed the course," said Dr. Helen Mayberg, Professor of Neurology, Neurosurgery, Psychiatry and Neuroscience at the Icahn School of Medicine at Mount Sinai. "Over eight years of observation, most of our study participants experienced an antidepressant response to the DBS of Area 25 that was robust and sustained. Given that patients with treatment-resistant depression are highly susceptible to recurrent depressive episodes, the ability of DBS to support long-term maintenance of an antidepressant response and prevention of relapse is a treatment advance that can mean the difference between getting on with your life or always looking over your shoulder for your next debilitating depressive episode."



The study documents long-term outcome data (4 to 8 years) for 28 patients who were enrolled. All study participants met criteria for major depressive disorder or bipolar 2 disorder, and were in a current depressive episode of at least 12 months duration with non-response to at least four antidepressant treatments, psychotherapy and electroconvulsive therapy. Participants underwent surgery at Emory University School of Medicine with the same surgeon, and all received the same device. Participants were seen by a study psychiatrist weekly for 32 weeks, starting at least 4 weeks prior to surgery. Visits were tapered to every six months for years 2—8 of the study. Twenty-three patients remain in long-term follow-up.

Response and remission rates were maintained at or above 50 percent and 30 percent respectively through years 2—8 of the follow-up period. Three-quarters of patients met the treatment response criterion for more than half of their participation in the study, with 21 percent showing continuous response to treatment from the first year forward.

Researchers are now preparing for the next study in this area—treatment-resistant patients are being recruited that will be implanted with a new prototype DBS system that allows simultaneous recordings of brain activity directly from the site of stimulation during active DBS therapy. Advanced imaging, behavioral and physiological assessments will also be performed at regular intervals. These studies will allow the opportunity to monitor the recovery trajectory over days, weeks, and months at the neural level.

"We anticipate that these brain signatures will provide important new insights into DBS mechanisms and, importantly, will help guide future decisions about DBS management that can further optimize clinical outcomes in our patients," said Dr. Mayberg.

Source: The Mount Sinai Hospital School of Medicine. "Long-term study data shows DBS is effective treatment for most severe form of depression." ScienceDaily. www.sciencedaily.com/releases/2019/10/191004074901.htm

November 2019

SUN	MON	TUE	WED	THU	FRI	SAT
					1	2
3	4 FSG	5 MDA	6 WR NAMI ANX/D	7	8 BPD	9
10	11 Remembrance Day	12 MDA	13 WR NAMI ANX/D	14	15	16
17	18 FSG	19 MDA MDM	20 WR NAMI ANX/D	21	22 BPD	23
24	25	26 MDA	27 WR NAMI ANX/D	28	29	30

ANX/D—Anxiety/Depression Support Group—Designed for adults 18+ dealing with anxiety and/or depression, and meet others who have gone through similar experiences. Self-help group with a laid-back atmosphere. Meets Wednesdays, 6:30—8 p.m. at 400 Elliott Ave., Unit 11. Contact CMHA for more information at 613-549-7027 or supportgroup.cmha@kingston.net

FSG—Family Support Group—Meets the first & third Monday of the month at 552 Princess St., Kingston. Enter back door from parking lot via Alfred Street. Drop-in format—no registration needed. 6:30—8 p.m. Contact FRC for further details 613-544-1213 or frc@amhs-kfla.ca.

MDA—Mood Disorders Peer Support Group—Open Adult. Meets from 7—9 pm every Tuesday at 552 Princess St., Kingston. Enter back door from parking lot via Alfred St. Ring bell for entry. Drop-in format. Free & confidential. Contact FRC for further information. Mood Disorders Association of Ontario affiliate.

MDM—Millennial Mood Disorder peer support group meets from 5:30—7 p.m. on the *third Tuesday of the month* at 552 Princess St. Affiliated with MDAO. Enter back door from parking lot via Alfred St.—ring bell for entry. Drop-in format. Free and confidential. Contact FRC for further info.

NAMI—Family-to-Family Education Classes—No cost to attend, but must pre-register. Open to caregivers of adults with mental illness. Register by contacting FRC at 613-544-1213 or email frc@amhs-kfla.ca. Wednesday evenings, 6:30—9 p.m. at 552 Princess St. Next course runs Spring 2020.

***SSRG—Suicide Survivors Recovery Group—CMHA sponsored discussion group for persons reconciling the loss of a loved one by suicide, or helping another person to do so. Meets at 400 Elliot Ave., Contact CMHA for details 613-549-7027

***MDEP—A Darker Shade of Blue—Men & Depression. Held at CMHA Kingston, 400 Elliot Ave., Unit11. No cost to attend. Contact CMHA for time/date at 613-549-7027

*** BMS—By My Side Partner Peer Support. Designed for those who have a spouse/partner who lives with mental illness/addiction. Group currently on hiatus. Please contact FRC for further information.

BPD—Borderline Personality Disorder Discussion/Support Group. Held on the 2nd and 4th Friday of the month from 10:30—11:30 a.m., Peer 17, 58 Dundas St. E. Napanee. You do not need to have BPD to attend the group—anyone interested in learning about BPD from someone now in recovery is welcome. For further information, email: makebpdstigmafree@outlook.com.

WR—Women's Resiliency Group. Meets Wed 9:30—11:30 a.m. at CMHA, 400 Elliott Ave., Unit 11. Call CMHA @ 613-549-7027 for information.

***PSSEO—Peer Support Group for those dealing with mental health and/or addiction concerns. On hiatus. Call Karen 613-403-1318 or email cps@psseo.ca for more info.

November beauty