

## STUDIES QUESTION AUTISM LINK TO ANTIDEPRESSANTS IN PREGNANCY

**MIAMI:** Two scientific studies published Tuesday suggested the risk of children developing autism after their mothers used antidepressants while pregnant may be lower than previously believed. One of the studies in the findings in the Journal of the American Medical Association included 1.5 million infants in Sweden from 1996 to 2012, making it one of the largest populations ever analyzed to understand the impact of antidepressant use during pregnancy. The study found that mothers' use of antidepressants early in pregnancy did not increase the risk of their children developing autism.

The report said these findings ran counter to several previous studies, and the reason for the

discrepancy could come down to how scientists adjust for a variety of potential confounding factors. "To our knowledge, this is one of the strongest studies to show that exposure to antidepressants during early pregnancy is not associated with autism, attention deficit hyperactivity disorder (ADHD) or poor fetal growth when taking into account the factors that lead to medication use in the first place," said lead author Brian D'Onofrio, professor at Indiana University.

"Balancing the risks and benefits of using antidepressants during pregnancy is an extremely difficult decision that every woman should make in consultation with her doctor," he added. "However, this study suggests use of these med-

ications while pregnant may be safer than previously thought." Most of the antidepressants examined for the study were selective serotonin reuptake inhibitors (SSRIs), a common class of drugs that includes Prozac, Zoloft and Celexa.

A second study looked at more than 35,000 children in Canada from 2002 to 2010 and found a slightly higher risk of autism among the children of women who took antidepressants, but the risk was no longer statistically significant after tweaking the adjustments for other factors, like genetics and environment. Both studies stopped short of proving any cause-and-effect. "Although a causal relationship cannot be ruled out, the previously observed association may be explained by

other factors," said the second study.

In 2015, a major Canadian study in JAMA, based on more than 145,000 pregnancies, found an 87 percent higher risk of autism when mothers took antidepressant medications later in pregnancy, a crucial time for brain development in the fetus. As many as one in 45 children are diagnosed with autism spectrum disorder in the United States, according to a recent study by the US Centers for Disease Control and Prevention. Scientists still do not fully understand what causes autism, though both genetics and environment are believed to play a role. Around 10 percent of pregnant women are currently being treated with antidepressants. — AFP



**CROATIA:** This picture shows a small hydro plant on the Korana river, in Karlovac, Croatia. — AFP

## BLUE HEART OF EUROPE AT RISK OF A HEART ATTACK

### CROATIAN RIVERS FACE HYDROELECTRIC PERIL

**KARLOVAC, Croatia:** Swans glide peacefully over green river waters in the central Croatian area of Karlovac, a tranquil spot popular with fishermen and swimmers that environmentalists fear could be devastated by hydropower projects. Croatia faces a dilemma as it produces no more than 75 percent of the electricity it needs for its 4.3 million people each year, half of which comes from its dense network of rivers. But to build on its self-sustainability risks damaging the appeal of these picturesque waterways, in a country where tourism brings in 18 percent of gross domestic product (GDP).

In 2016, the Karlovac region alone brought in almost 300,000 tourists. Several dozen small hydroelectric power projects are now planned across Croatia, built by either the state-run HEP national energy group or private companies. Activists fear they will have a far-reaching negative impact in a country that prides itself on its pristine nature. "Small hydro plants are nothing but misleading to the public, since it is implied that their impact is small," said Irma Popovic Dujmovic from the local branch of environmental watchdog WWF.

"In fact, their impact on small rivers is the same as the impact of large plants on large rivers, notably if dams are constructed," she said. In Croatia, the situation is most critical in Karlovac, known as the "town on four rivers" - one of which has already been damaged by hydropower. "The Lesce plant killed the Dobra river. The Korana,

Mreznica and Kupa (rivers) are now at stake," said Denis Franciskovic of Eko Pan, a Croatian environmental group.

#### Significantly fewer fish

The large Lesce plant was inaugurated in 2010 — the first in the former Yugoslav republic since it became independent in 1991 — with the aim of boosting economic activity in an area particularly hard hit during the 1990s Balkan wars. But barely a year later, authorities named a special team to deal with the plant's damage after it flooded a 13-kilometre stretch of one of Croatia's most beautiful canyons. Zeljko Capan from a local fishing club said he and fellow fishers had noticed "significantly fewer fish" since the plant was installed.

"We should concentrate on tourism. What else is there to do in Karlovac and its region?" Eight small hydropower plants are now planned in the area, where unemployment is high and communities are trying to revive their economies with activities for visitors such as canoeing and rafting. Forty percent of the region is also in Natura 2000, a European Union network aimed at protecting biodiversity across Europe.

Officials acknowledge that the Lesce plant's construction, based on a 1985 environmental impact study, gave hydropower a bad name, but say lessons have been learned. "The environment will not be destroyed, it will be preserved," said Marinko Maradin, head of Karlovac's department

for spatial planning and the environment. Hydropower has been used in the region for centuries without devastating nature, he said. "There is almost no waterfall without human intervention, from old watermills to modern plants."

#### Dangers are real

Advocates of small-scale hydropower emphasize the need to stabilize and distribute the system, bringing production facilities closer to consumers. Croatia's accession to the European Union in 2013 has also helped to improve regulations in the sector. But the financial benefits for local communities are often small. The town of Ozalj in central Croatia, for example, gets less than 10,000 euros (\$10,500) annually as compensation from a plant on the Kupa river.

Nikola Zivcic, a 57-year-old resident of the tiny town of Slunj on the Korana river, is worried about two plants planned in the area known for its picturesque waterfalls and waterfalls. "The benefits (of the plants) are small or negligible while dangers and potential damages are real," Zivcic said, stressing that tourism was crucial to the town's survival. Concerns about new projects go beyond Croatia's borders and across the Balkans, where there is a "tsunami" of plans to construct more than 2,000 plants in the next few years, according to Franciskovic. "The blue heart of Europe is at risk of a heart attack," warns Balkan Rivers, an ecological campaign group. — AFP

## BATTLING OLD HABITS, THE MAYOR OF WARSAW LAUNCHES CLIMATE REVOLUTION

**LONDON:** When Hanna Gronkiewicz-Waltz, the mayor of Warsaw, introduced bus lanes on one of the city's main arteries to cut travel times by public transport and to encourage more people to use it, not everybody in the Polish capital was impressed. "There was a lot of opposition," Gronkiewicz-Waltz said. "It's not easy to convince people to use public transport if driving a car is still quite an entrenched habit."

Eight years later, Warsaw's residents - or Varsovians - have not only got used to bus lanes but thanks to the city's growing network of bike lanes they can now also cycle around town using one of the 4,500 municipal bicycles available for hire. Gronkiewicz-Waltz, who took office in 2006 as the first woman to hold the position, says she wants to tackle Warsaw's pollution and make Poland's capital and largest city climate-friendly as a legacy for future generations.

"Everybody wants to live in a healthy environment," Gronkiewicz-Waltz told the Thomson Reuters Foundation in an interview in Polish. "In my case it's also about my daughter and grandchildren - they are an additional motivation." Around the world, cities are increasingly at the forefront of action to curb climate change. Some have set ambitious emissions reduction goals, while others have pushed ahead with policies despite national-level foot dragging.

And increasingly, many of the cities leading in climate change - Paris, Washington, Sydney, Cape Town - are run by women. In two years, the number of women leading large cities that are at the forefront of climate action has risen from four to 16, according to the C40 Cities network of more than 80 cities

committed to addressing climate change.

But while Gronkiewicz-Waltz sometimes has to tell her husband off for not sorting rubbish properly, she doesn't think women are better climate defenders than men. "I don't want to sound sexist," she said. "Perhaps women pay more attention to green areas and cleanliness but men are sensitive, too."

#### Revolution of the mindsets

Changes happening in Warsaw are perhaps most visible on the banks of the Vistula, Poland's biggest river. One of its shores has been returned back to its natural state, allowing Varsovians to relax on a sandy beach, cycle, walk along its leafy banks and even enjoy cross-country skiing in the winter. "It's like being on holiday," said Gronkiewicz-Waltz. Following upgrading work, the city's wastewater plant now generates nearly 50 percent of its power onsite, while later this year Varsovians will be able to test a new car sharing scheme - another initiative aimed at making the capital's air cleaner.

Gronkiewicz-Waltz said many investments towards a greener environment in Warsaw have been possible thanks to funding from the European Union. "Modernizing old trams, SKM (rapid city trains) would certainly have been impossible without EU funds," said Gronkiewicz-Waltz, a former central bank head. She said while changing mindsets and cutting planet-warming emissions in coal-dependent Poland was a struggle, the country had emerged as a pioneer in the battle against climate change, in part thanks to support from young people. — Reuters



**MANILA:** This undated handout photo shows a scientist removing the top of the shell revealing a giant shipworm living inside, at a laboratory in Manila. — AFP

## SULPHUR-POWERED SHIPWORM UNEARTHED IN PHILIPPINES

**MANILA:** An enormous black worm that lives in the mud of the sea floor and survives on the remnants of noxious gases digested by bacteria has been unveiled by scientists for the first time. The slimy giant shipworm can grow up to 155 centimeters in length, despite living a sedentary life in ocean sediment and apparently eating nothing more than the waste products of the micro-organisms that live in its gills.

"We are amazed. This is the first time we saw a shipworm as large as this. Usually, shipworms are only as short as a matchstick and are white," Filipino marine biologist Julie Albano said. The shipworm is not actually a worm at all, but a bivalve-like mussels and clams and has its own brittle, tusk-like shell. Also known by its scientific name Kuphus Polythalamia, the mollusc is radically different from its smaller shipworm cousins, which burrow in-and digest-wood.

Researchers who analyzed the creature found that although it had its own diges-

tive system, this was shrunken and appeared to be largely redundant. Instead, Kuphus Polythalamia relies on bacteria that live in its gills, which digest hydrogen sulphide - a gas that smells of rotten eggs - from the mud and emits traces of carbon. The process is photosynthesis in plants, where they take carbon dioxide from the air, use the carbon to grow and expel oxygen as a by-product.

"We suspected the giant shipworm was radically different from other wood-eating shipworms. Finding the animal confirmed that," said Margo Haygood, a research professor at the University of Utah who also took part in the study. The discovery of the giant shipworm, a species never before studied, marked the first time scientists had live specimens in hand, according to an article published this week in American journal Proceedings of the National Academy of Sciences. "This remarkable species remains to be fully described and explained," the journal said. — AFP

## BATTLE BREWS OVER WHERE TO KEEP LA ZOO'S ELEPHANT

**LOS ANGELES:** A city councilman said Tuesday that he wants to move an Asian elephant from its longtime home at the Los Angeles Zoo to a sanctuary where it can roam more widely. But zoo officials say the animal's state-of-the-art habitat gives him the range he needs for a good life. Councilman Paul Koretz and the group Voice for the Animals say Billy's habitat is constrained and that behavior by Billy in which he some-

times bobs his head is a sign of trouble. Koretz intends to introduce a plan for moving Billy at Wednesday's council meeting.

Billy, born in 1985 and a resident of the zoo since 1989, is part of the Elephants of Asia exhibit that includes two females, Tina and Jewel. They are separated from him by a fence. Advocates of moving Billy to an elephant sanctuary contend he cannot get enough exercise at

the zoo for his physical and psychological health. "I don't believe that the zoo can take the necessary care and give what the elephants need," said Melya Kaplan, founder of the Voice for the Animals Foundation, told reporters.

Zoo officials held their own news conference at the zoo to defend their care of Billy, who moved about in the background. "Billy is given free range," said Josh Sisk, curator of mammals. "He's given options each day. He has enrichment devices." The Elephants of Asia exhibit opened in 2010 and is the zoo's largest habitat, encompassing 6.5 acres. Almost half of it is open space and includes bathing pools, a waterfall and varied topography.

The habitat also includes a high-tech barn for care of all sizes of elephants. Zoo officials said the elephant's habitat exceeds state and federal standards, as well as those of the Association of Zoos and Aquariums. Opponents contend that Billy and the females cannot use the entire area set aside for them because they are kept separated. Zoo Director John Lewis said the separation is necessary. "There is a barrier between them. But they touch, they share food, they talk to each other, they socialize," he said.

"And the barrier is there because the two girls are post-reproductive cows, and we don't want to take the risk that they might be bred by Billy because that would be really bad for them." Billy displays the head bobbing behavior when he is aware he will be fed soon, Lewis said. "He uses the bobbing in anticipation of his keepers, when he hears them in the barn, when he knows it's time to get fed," he said. Voice for the Animals plans to raise funds for moving Billy at a May comedy fundraiser featuring celebrities including Lily Tomlin and Craig Ferguson. — AP



**LOS ANGELES:** Billy, a male Asian elephant, roams in his habitat at the Elephants of Asia exhibit at the Los Angeles Zoo. — AP

## KENYANS PROTECT WETLANDS TO CURB WATER SCARCITY

**BUSIA, Kenya:** Armed with a hoe and Wellington boots, George Wandera planted bamboo seedlings in neatly dug holes along the banks of a stream on his farm that feeds a nearby lake in western Kenya. "I've never tried this on my farm before but it's the first step in protecting the stream," he said. "Before the last downpour a few days ago, the water source had completely dried up." Large swathes of Kenya - including parts of Busia county where Wandera lives - are experiencing severe water shortages, which have damaged crops and left 2.6 million people in need of aid.

The country's wetlands too have suffered in the drought, putting at risk communities who depend on them for fishing or irrigation, and who rely on them to act as a buffer from floods and drought. "Wetlands such as lakes and floodplains act as natural safeguards against disasters, by

absorbing excess rainfall during floods, with the stored water then available in times of drought," said Julie Mulonga, program manager at Wetlands International Kenya, a conservation charity in Busia.

During the current drought, farmers and herders have been drawing water from the wetlands, and streams feeding them have run dry. Unpredictable rainfall is not the only reason Kenya's wetlands are under threat. Local communities have also been draining them to grow crops, Mulonga said. Wandera remembers when large parts of the Sio-Siteko wetland, near the border with Uganda, were drained to make way for farmland. "We never thought our activities were harmful until we saw the consequences - that is, more floods during the rainy season and less water during the dry season, leading to a decline in vegetation and animal species," he said. — Reuters