The weaker sex? Science that shows women are stronger than men | Gender | The Guardian

The new study's lead author, Professor Virginia Zarulli, wrote in the journal PNAS: "The conditions experienced by the people in the analysed populations were horrific. Even though the crises reduced the female survival advantage in life expectancy, women still survived better than men. Stacey Dooley investigates: 'After my third husband died, they strapped a suicide bomb to me'. Insomnia and me: 'I’ve suffered for such a long time'. Transitioning teens: Is there enough support for gender non-conforming young people? Non-surgical beauty treatments: Undercover on a
In Kenya, I meet female security guards everywhere, patrolling offices and hotels. Out in rural areas, there are women doing hard physical labour, giving birth seven hours later. World record holder Paula Radcliffe has trained through two pregnancies. Why, then, are we not all Amazons? Why male activity — is being recast as a female one, too. Indeed, women are known to be particularly good at endurance running, notes Marlene Zuk, who runs a lab focusing on evolutionary biology at St. Erenne University. Their muscles were seemingly more fatigue resistant. Men have a higher percentage of type II fast-twitch fibres. Type I are better for endurance; type II are more suited for speed and strength. This prevents muscle breakdown and strengthens the muscle-fatigue resistance argument. He hopes to draw a conclusion soon.

I had a nasty injury halfway through the run. It worsened for a few days and reached heavy limping stage. And it did. As an event grows, I strengthen mentally and physically. Millet disputes this, citing no empirical evidence. Take an American study of 92, marathon results at 14 races that showed while both sexes slowed during the second half, men slowed more. Their grand egos sent them shooting from the start line before falling backwards. During the period, Lepers showed that the sex differences in elite Ironman Hawaii performance remained relatively stable at around 35 to 45. Why could this be down to physiological and psychological advantages when racing for days on end. The evidence is conclusive. Or it could simply be a numbers game and outliers. The Spine race that Paris won counted just 11 women among its starters. The next woman came in two days behind Paris. Whatever your level, gaining that extra ounce of performance over water, road and track is what this magazine is all about.

With your Triathlon subscription, you have the experts on hand to encourage and guide you every step of the way. I saw soldiers in the bushes as men. The past few years have seen women outperform men at the extremes of endurance. It was also run-specific, but this closing of the gender gap as distance grows is reflected in triathlon, too. Brit Lucy Charles-Barkley regularly wins top exiting the swim, including second overall at Challenge Roth. It was reduced to km that year because of adverse weather but it was still tough.

Women really are stronger than men, according to study - BBC Three

Moalem recalls his time tending to HIV-positive children at an orphanage in Bangkok, and his observation that the HIV-positive boys were consistently more likely to get sick with opportunistic infections than the HIV-positive girls. He goes on to note that HIV-positive men are also more likely than HIV-positive women to develop tuberculosis and pneumonia, while HIV-positive women tend to have higher immune-cell counts — a sign of immunological strength — in the early stages of HIV infection than men do.

The X chromosome carries a large number of genes involved in immune system functioning. Moalem argues that because women have two copies of the X chromosome, they are able to produce a more diverse and effective population of immune cells than if they relied on the immune genes of one X chromosome, as men do. But there is a price for that more aggressive immune response; sometimes it goes overboard and starts overreacting to benign things, such as our own cells.

This is the phenomenon of autoimmunity, and it disproportionately affects women. Having two X chromosomes also offers an unparalleled advantage if it happens that a gene on one of those chromosomes is dangerously mutated. Say you inherit a malfunctioning gene on the X chromosome from your mother that might be associated with developmental problems. If you also have inherited an X chromosome from your father that carries a functional copy of that gene, you have a back-up, an understudy, for that faulty gene. Moalem also highlights a problem that numerous female authors before him have also drawn attention to: that medical science and medicine still view women as being biologically the same as men.

That persistent ignorance — one might even call it wilful denialism — has had some devastating consequences. Women with autoimmune conditions have long had their symptoms dismissed or trivialised by the medical establishment, which was working on the assumption that these diseases were equally prevalent in men and women. Not that that lack of understanding has slowed females down too much. Immunity and our DNA: Why women are the stronger sex. Please try again later. The Sydney Morning Herald. By Bianca Nogrady April 24, — 4. Save Log in, register or subscribe to save articles for later. On the downside, a powerful immune response also makes women more susceptible to autoimmune diseases, such as rheumatoid arthritis and multiple sclerosis.

The body is so good at fighting off infection that it attacks its own cells. And this may explain why women tend to report more pain and sickness than men. Another factor is simply that men are dying more. At least some of the gaps in health and survival may be social, reflecting gender behaviour. Women may be more likely to seek medical help, for instance. Men may have less healthy diets or do more dangerous work. Nonetheless, Austad and Sandberg are convinced that nature accounts for a good deal of what we see. If they are right, this raises a deeper scientific conundrum. Our bodies adapted over millennia to our environments. So what could it have been in our evolutionary past that gave the female body a little more of this magical robustness? How and why would one sex have developed a survival edge over the other? Studies of hunter-gatherer societies, who live the way we all may have done before fixed settlements and agriculture, provide a few clues.

Many anthropologists studying tribal communities in Africa, South America, Asia and Australia believe early humans lived fairly equal lives, sharing responsibilities for food, shelter and raising children. Instead, the evidence shows that women would have done at least the same physical work as men, but with the added burden of bearing children. The more research that is done, the more this is reinforced. Even hunting — that prototypical male activity — is being recast as a female one too. Indeed, women are known to be particularly good at endurance running, notes Marlene Zuk, who runs a lab focusing on evolutionary biology at the University of Minnesota. In, for example, Amber Miller ran the Chicago marathon before giving birth seven hours later. World record holder Paula Radcliffe has trained through two pregnancies. Why, then, are we not all Amazons? Why do we imagine femininity to mean small, waif-like bodies? The lives of most ordinary women, outside the pages of magazines, destroy this notion.

In Kenya, I meet female security guards everywhere, patrolling offices and hotels. Out in rural areas, there are women doing hard physical labour,
often hauling their children in slings. Our ancestors would have done the same. In evolutionary terms, these were the circumstances under which our bodies were forged. For an enormous chunk of early human history, as we migrated through Africa to the rest of the world, women would also have travelled hundreds or thousands of miles, sometimes under extreme environmental conditions. That means being pregnant for nine months. When I gave birth to my son, I did the most physically demanding thing a human can do. Yet I am considered the weaker sex. Zihlman reminds me that my body was made strong by the struggles of countless generations of women who went before. I happen to remember, in that moment, that at home I do all the DIY. Separate symptoms Women and men present different symptoms for the same medical conditions.

Women are more likely to have insomnia and fatigue in the weeks before they have a heart attack, rather than the chest pain commonly experienced by men. Changes of life Women in India, Japan and China experience far fewer menopause symptoms than western women who commonly report hot flushes, night sweats, depression and insomnia. Casual sex Women are choosier but not more chaste than men. A study by two German researchers, Andreas Baranowski and Heiko Hecht, found that women want casual sex just as much as men and were as likely as males to have sex with a stranger, as long as it was in a safe environment.

Risk business Testosterone is associated with higher levels of optimism, rather than aggression. Saliva samples taken from traders on the London Stock Exchange confirmed they had higher than average testosterone levels. Scientists from Britain, the USA and Spain concluded this increase made the traders more optimistic so more likely to take big financial risks. The Observer Gender.

The Stronger Sex - Wikipedia

Research and policy have not taken this disparity into account. Men have traditionally been perceived as the stronger sex and societies have long favoured boys, but across the human lifespan it is women who win out. Girls born prematurely are more likely to survive than little boys, and at the other end of the spectrum, the vast majority of people over ages of age are women. A raft of killer diseases affects men more viciously than women - heart disease, cancer, liver disease, kidney disease and diabetes.

And a sobering thought: although boys are born for every girls, by the age of 40, the numbers have evened out. We might be tempted to put this down to lifestyle - the fact that men are more likely to smoke, do hard physical jobs and engage in risky behaviour. While this is all true, Moalem says it doesn't fully account for the trend, which holds across centuries, countries and cultures. He explains that it's down to the two X chromosomes in every gene in a woman's body, one from her father, the other from her mother. The healthier X is activated, the other silenced, but the silenced X continues to play a role, re-activating when needed to help maintain well-being and health; whereas men, with just one X chromosome, are forced to rely on it regardless of its quality.

Despite these very real differences, scientific research has drawn largely on male subjects for clinical trials, working on male cells and even preferring male mice to females because they yielded more coherent results. The result is that, "With a few exceptions, we clinically treat women just like we treat men," Moalem says. Moalem's book backs up her contention that marginalising women in medical research has adversely affected women, even put lives in danger. Products have been withdrawn and guidance altered when the female response became apparent. One reason behind this bias in research, Moalem implies, is that science is dominated by men. He nicely weaves alternative versions of scientific discoveries - where women got there first but were suppressed in later accounts - into his narrative, introducing pioneering figures like Nettie Stevens that I for one had never heard of.

Stevens, who worked on mealworms, was the first scientist to identify the Y chromosome, but the finding is generally ascribed to Edmund Beecher Wilson, who rushed the publication of his own research on the topic through after seeing Stevens's findings. Easy to do, given that Wilson happened to be on the editorial board of the journal that published his paper. The Better Half is popular science, aspiring to translate intricate concepts into everyday language. As such it is replete with colourful anecdotes and recollections from Moalem's own experience that humanise abstract concepts. He shares a wealth of fascinating factoids, such as women's preternatural ability to recognize colour. Some women have tetrachromatic vision, a sort of "visual superpower. Perhaps inevitably, though, The Better Half can at times feel oversimplified. As an event grows, I strengthen mentally and physically. Millet disputes this, citing no empirical evidence.

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Brit Lucy Charles-Barclay regularly hits top exiting the swim, including second overall at Challenge Roth. It was reduced to km that year because of adverse weather but it was still tough. Studies show that their FatMax, the exercise intensity at which the highest rate of fat oxidation is observed, is higher in women than men. The resulting conclusion is that females can not only spare more precious glycogen stores for intense parts of the race, they can race fast and still predominantly tap into a near extinguishable supply of fat-burning energy, too. Ahh, the mental. Sports psychologist Dr Carla Mejian is currently studying pain experiences of ultra female athletes. To that end, Smith concludes that she has a high pain threshold and quite an extreme personality. But reverting back to the race, Ryf came in Ultimately, it seems that females excel at the true extreme fringes of endurance events. In , year-old Sarah Thomas was treated for breast cancer.

Twelve months later, the American become the first person to swim across the English Channel four times non-stop. She finished over 6hrs ahead
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Easy to do, given that Wilson happened to be on the editorial board of the journal that published his paper. The Better Half is popular science, aspiring to translate intricate concepts about genetics into ordinary language. As such it is replete with colourful anecdotes and recollections from Moalem's own experience that humanise abstract concepts. He shares a wealth of fascinating factoids, such as women's preternatural ability to recognize colour. Some women have tetrachromatic vision, a sort of "visual superpower. Perhaps inevitably, though, The Better Half can at times feel oversimplified. To a non-geneticist, obliged to take his word for it, it's unnerving when Moalem leaps from genetics to immunology to neuroscience to the functioning of the potato a topic he has studied in depth and back again. The book suffers, too, from repetition. Moalem makes the point that women live longer than men; then says it again, and again. But Moalem's essential thesis is valid and important, and deserves attention both within the scientific community and beyond - that women's genetic difference from men results in a different response to both diseases and treatments, which research ought not just to account for but also study and attempt to understand.

No doubt many of you will have long suspected this is the case, and now you have fresh scientific findings to back up your suspicions. A recent academic study has shown that under extreme conditions such as famines, epidemics and enslavement, women are able to survive for longer than men. Across modern populations, women outlive men in almost all instances, with life expectancy for English women being...