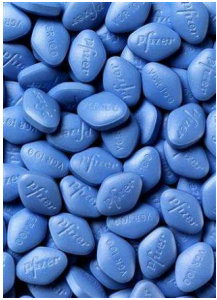


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By: Stefan Anitei, Science Editor



10 Years of Viagra

The drug that changed human sexuality

For ten years, the blue pill has been changing the lives of 35 millions men and women. Viagra is the result of an accident at Pfizer Laboratories.

"Originally, we were testing sildenafil, the active drug in Viagra, as a cardiovascular drug and for its ability to lower blood pressure. But one thing that was found during those trials is that people didn't want to give the medication back because of the side effect of having erections that were harder, firmer and lasted longer," said Dr Brian Klee, senior medical director at Pfizer.

Viagra changed impotence from a taboo dooming issue into an easy to treat condition. Previous impotence treatments involved complicated, harmful and painful procedures, like penis prosthesis, penis injections, urethral suppositories, constrictor rings, vacuum devices, hormones, vascular surgery and even miracle products like chilly peppers, chocolate, licorice, butter, anchovies, oysters, Spanish flies (the last one is the most harmful due to its prolonged vasodilatory effect) and other aphrodisiacs.

Previously to Viagra, men having less than five to six nocturnal erections were diagnosed to have a physical issue, and those who did get nocturnal erections, to have a psychological one and were sent to a sex counselor.

"What we have come to understand in the past 10 years is that ED is a vascular disease. What happens is veins and arteries that deliver and remove blood from the penis are not working the way they should, and Viagra allows those vessels to dilate and increase blood flow to the penis," said Klee.

Still, many people are disappointed with Viagra, as it "does not correspond to the way they want to have sex," said Dr Abraham Morgentaler, director of Men's Health Boston, and associate clinical professor of urology at Harvard Medical School.

Viagra is most effective on an empty stomach or following a low-fat meal. Its effect is felt in about 30 minutes, stands for four hours, and requires sexual arousal.

But many people feel uncomfortable with the idea of programming sex, as many men and women regard sex as something spontaneous and romantic.

Viagra and the Internet

A negative side is also the easy availability of the drug.

"It's the use of Viagra by healthy young men who don't need it. These young men take a pill whenever they go out. Maybe because they are inexperienced or shy and Viagra makes them more confident, or maybe because they have inflated ideas about what sex is supposed to be like from seeing Internet porn, which they also have easy access to, and they want to heighten their feelings of masculinity," said Morgentaler.

"I am concerned - not that these young men will get addicted physically, but that they will

become psychologically dependent on Viagra. Sex is an entree into a relationship, and most often what we want from a relationship is to be loved for what we are. But some of these young men feel they have to take a pill to be acceptable, and I fear they are potentially missing the opportunity to have true emotional connections with a partner, based on reality, not mythology," he added.

Moreover, on Internet people can buy sildenafil pills produced in Asian countries (like China, Thailand and Malaysia) at prices of \$1-5, while those produced by the authorized companies cost \$13-20.

Viagra, more than sex

Sildenafil has also other medical uses:

- Pulmonary hypertension: under the name Revatio, sildenafil is used against this severe condition of high pressure in the blood vessels leading to the lungs.
- Mountain sickness: Viagra can decrease blood pressure at high altitude, increasing the blood's ability to absorb oxygen.
- Raynaud's phenomenon: in this condition, exposure to the cold determines spasm of the small arteries that transport blood to the fingers and toes, which turn pale, cold and painful.
- Heart disease: Viagra could be employed in case of congestive heart failure or diastolic dysfunction.
- More: a low-concentration solution of sildenafil in water significantly prolongs the time before cut flowers wilt: from one week to two weeks.

The bad side of Viagra

The most common side effects are headaches and facial flushing, which take place in 15% of the subjects, but also nasal congestion, sneezing, indigestion, back pain, prolonged erections, palpitations and photophobia. These are benign and temporary.

But the most worrying effect of the anti-impotence drugs is the widening of the arteries, translated to low blood pressure, priapism, heart attack, ventricular arrhythmias, stroke and increased intraocular pressure (which induces glaucoma and, in time, even blindness).

People taking organic nitrites or nitrates should never use ED pills. Viagra is also forbidden for men with cardiovascular risk factors, severe hepatic impairment (decreased liver function), severe impairment in renal function, hypotension (low blood pressure), recent stroke or heart attack and hereditary degenerative retinal disorders. Viagra is not recommended to those people who take anti-HIV medication.

Recent researches showed that sildenafil and similar chemicals (like tadalafil from Cialis and vardenafil from Levitra) damage the inner ear and cause hearing loss, sometimes in just two days of drug consumption. The drug has also been found to harm the sperm, destroying its ability to fertilize an ovule. Human sperm cells exposed to a Viagra solution, having the same concentration as that occurring in the blood of a man after taking just one pill, turned sperm cells less active; moreover, these cells had damaged acrosomes (the chemical-filled cap-like structures that enable the sperm to break into an ovule). A British man who took an extra dose of Viagra lost color senses, seeing everything in blue hues.