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How Many of Us Are There?

An Investigative Report

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Article appeared in Polare magazine: February 2002 Last Update: October 2013 Last Reviewed: September 2015



Professor Lynn Conway

In discussions of transsexualism, people usually fixate on the question of "what causes it". However, another important key question is hardly ever discussed. That question is: How prevalent is transsexualism?

'Prevalence' is the number of cases present in a given population at a given time. If there are 100 cases of a medical condition in a city of 100,000, then the prevalence there at that time is 1 in 1,000. Fortunately, we can triangulate on good estimates of the prevalence of transsexualism without being a research scientist. Any good journalist could easily zero-in on good ball-park estimates.

Medical authority figures often quote a prevalence of 1 in 30,000 for M.T.F. transsexualism and 1 in 100,000 for F.T.M. transsexualism. You'll see these figures over and over again, even in recent news stories in the *Washington Post* and the *New York Times*. But don't these figures seem odd to you? They portray transsexualism as being incredibly rare. However, many people nowadays know a transsexual or know of some in their school, company or small community. Where do these "extreme rarity" figures keep coming from?

These prevalence numbers are a direct challenge to the psychiatric community's credibility, professionalism and veracity in the entire area of transsexualism.

These figures are from the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (D.S.M.-IV). The numbers are often sent to the media by the two "elite psychiatric centres" that have long promulgated and dominated thinking regarding "psychiatric theories of transsexualism", namely the Clarke Institute in Toronto, Canada and the Johns Hopkins School of Medicine in Baltimore, MD., U.S.A. Here is the actual quote from the D.S.M.-IV-T.R. August, 2000, p. 579:

Prevalence: There are no recent epidemiological studies to provide data on prevalence of Gender Identity Disorder. Data from smaller countries in Europe with access to total population statistics and referrals suggest that roughly 1 per 30,000 adult males and 1 per 100,000 adult females seek sex reassignment surgery.

These figures are from decades old data when modern S.R.S. first became available. However, the number of people seeking and obtaining S.R.S. has increased dramatically since then. More importantly, these figures do not indicate the prevalence of intense transsexualism. They only include those who bravely stepped forward and asked for S.R.S. at a time when discrimination was incredibly intense. Common sense says there were many more who suffered in silence than came forward openly. But how many?

Let's do some numerical 'detective' work. We can approximate the prevalence of M.T.F. transsexualism in the U.S. by estimating how many transsexuals here have already had S.R.S. We can then divide that number by the population of adult males in the U.S. (up to about age sixty, since those older had little access to the surgery in the past).

Before 1960, only a tiny handful of S.R.S. operations were done on U.S. citizens. George Burou, M.D. of Casablanca, Morocco, then began doing a large series of operations in the 1960's using a vastly improved new 'penile inversion' technique. Harry Benjamin, M.D., a U.S. physician who had done pioneering research and clinical treatments of transsexualism, began referring many U.S. transsexuals to Dr. Burou and to several other surgeons who used Burou's new technique. (I later learned from Dr. Benjamin that in 1968 I had been among the first 600 to 700 transsexuals from the U.S. to have had S.R.S.).

The U.S. numbers grew in the 1970s as gender identity programs at Johns Hopkins and Stanford University triggered an easing of restrictions on S.R.S. in U.S. hospitals, and several U.S. surgeons began performing S.R.S.. Even more patients went to Burou and other experienced surgeons abroad in the '70s. I learned from Dr. Benjamin in 1973 that 2,500 S.R.S. operations had been done on U.S. transsexual women by that date.

The list below shows my estimate of S.R.S. operations done by major S.R.S. surgeons both here and abroad on U.S. citizens in recent decades, extrapolated to include those done by many secondary surgeons (each performing smaller numbers per year). A range of

values is given, from conservative to most likely numbers. These numbers do not count other transsexual operations also done by these surgeons (such as mammoplasty, labiaplasty and S.R.S. repairs).

Estimates of M.T.F. S.R.S. operations among U.S. residents:

- **1960's**: 1,000
- **1970's**: 6,000 - 7,000
- **1980's**: 9,000 - 12,000
- **1990's to 2002**: 14,000 - 20,000

About 800-1000 M.T.F. S.R.S. operations are now performed in the U.S. each year, and as many or more are performed on U.S. citizens abroad (for example in countries like Thailand, where the quality of S.R.S. is excellent and the cost is much lower). The top three U.S. surgeons (Eugene Schrang, Toby Meltzer and Stanley Biber) together now perform a total of 400 to 500 S.R.S. operations each year. Stanley Biber alone has done over 4,500 S.R.S. operations since he began in 1969. For many years Dr. Biber did two S.R.S.s per day, three days per week!

Adding up these numbers we find that there are at least 32,000 to 40,000 post-operative transsexual women in the United States. Of course some surgeries done by U.S. surgeons are on foreigners (perhaps 15%?). And some who've undergone S.R.S. have passed away by now. However, the majority of post-operative transsexuals had S.R.S. within the past fifteen years, and a high percentage of them are still living. Transsexuals in the smaller group who underwent S.R.S. in the 1960s to mid '80s were mostly young - in their twenties and early-thirties, and thus most of those women are also still alive. Even accounting for mortalities, I estimate that the number of post-ops in the United States is greater than 32,000.

Now to determine the prevalence of M.T.F. S.R.S., we simply divide 32,000 by 80,000,000, which is the number of United States males between 18 - 60 (the age range from which most current post-ops originated):

$$32,000/80,000,000 = 1/2500$$

We discover to our amazement that at least one out of every 2500 persons born male in the United States has already undergone S.R.S. to become female! This 1:2,500 estimate is vastly higher than the 1:30,000 estimate so oft-quoted by the medical community. The D.S.M.-IV number is clearly way off, and by at least a factor of 12! However, on closer examination we will find the error is far worse than that!

Remember that the D.S.M.-IV 'estimate' is for the prevalence of transsexualism, not the prevalence of S.R.S.. Recent newspapers articles always make that interpretation, and refer to the 1:30,000 figure as a "the number of transsexuals".

I estimate at least five to ten times as many people suffer intense M.T.F. transsexualism than have already undergone S.R.S.. The reasons are obvious: Many transsexuals are unaware of the options and treatments for resolving the condition, and suffer in silence thinking there is no hope. Many are terrified to 'come-out' and seek help for fear of social stigmatization. Many more are incapable of paying the high medical costs for transition. Thus there must be 160,000 to 320,000 untreated cases of intense transsexualism in the U.S. The prevalence of M.T.F. transsexualism is thus greater than 1:500 and may be as high as 1:250. Therefore, the D.S.M.-IV prevalence numbers are wrong by more than two orders of magnitude.

My estimates are quite consistent with the estimates of prevalence in other cultures where transsexuals have some means to gender transition. For example, estimates of the number of Hijra in India range between 1,000,000 and 2,000,000 in a country of about one billion population. Given about 1.5 million post-op Hijra in a source population of about 375 million males over age 13, the prevalence of Hijra is on the order of $1.5/375 = 1:250$.

These numbers are further supported by a recent survey of transsexuals in Malaysia, where there is a 'street tranny' culture somewhat like that in the U.S. The Malaysian count yielded 50,000 transsexuals living as women in a population of 21.8 million. The prevalence is thus 50,000 divided by about 8.2 million males over age 13, and is therefore about 1:170.

All these studies begin to triangulate on a likely prevalence of intense M.T.F. transsexualism in the range of 1:250 to 1:200. This is 150 times the number (1:30,000) published by the A.P.A. in the D.S.M.-IV!

By comparison, consider the prevalence of other conditions having profound impacts on people's lives: The approximate prevalence of muscular dystrophy is 1:5000, multiple sclerosis (M.S.) is 1:1000, cleft lip/palate is 1:1000, cerebral palsy is 1:500, blindness is 1:350, deafness is 1:250 and rheumatoid arthritis is about 1:100. All of these conditions are high on our society's radar screen and there is massive public empathy for those who suffer from them. There are large research funds available for studying and treating these conditions, and patients have welcome access to any existing medical treatments that might relieve such conditions. Contrast that to intense transsexualism, which has an equally profound impact upon a person's life. This socially unpopular condition is totally off our society's radar screen, access to effective treatment is out of reach for the vast majority of sufferers, and the medical establishment is totally unaware of the high prevalence (~1:200) and tragic impact of the condition.

How could the psychiatric community be so ignorant of this reality, and why would they so grossly understate the transsexual prevalence numbers? First of all, the psychiatric community generally ignores cross-cultural or anthropological studies of human behaviour. That community also seems out of touch with what goes on in the real world of transsexual therapy and surgeries and on the streets in our own society. It's also in the self-interest of psychiatrists to have their patients believe that transsexualism is incredibly rare, for then it takes years of expensive counselling for the psychiatrist to be convinced that a patient is a 'true transsexual' who needs S.R.S..

The complete invisibility of the large numbers of post-op transsexual women living in stealth also keeps the estimates low. After all, the

only transsexuals visible to most people in our society (who don't see the big city, late night street scene) are the transsexual minority groupings of (i) young and openly effeminate boys and (ii) older transitioners and autogynephiles who are having difficulty passing and coping during or after transition. Those are also the only groups who tend to be encountered by psychiatrists. The street trannies are off everyone's radar screen and never see psychiatrists. And the large numbers of more advantaged young to middle-aged transsexuals who are managing their own transitions would never think of going to a psychiatrist to "help them with their mental illness problems". Instead they go to experienced, non-judgmental, gender counsellors.

Most psychiatrists therefore never see the vastly larger number of inconspicuous, successfully transitioning transsexuals. Most of those cases quietly undertake social/hormonal transitions with the help of practical (non-psychiatric, non-behaviourist) counselling. They enter and complete their R.L.E., obtain S.R.S., and then assimilate back into society in stealth mode, without ever interacting with traditional psychiatrists.

It also seems that none in the psychiatric community think quantitatively, in the manner of scientists and engineers, so it's no surprise they didn't notice how far off their numbers were. It took a research engineer (Lynn Conway, in January 2001) to visualize the error, come up with the ballpark numbers, and do the simple calculation showing that the prevalence of post-op transsexual women in the U.S. is at least 1:2,500 - implying a prevalence of intense transsexualism of 1:500 to 1:250.

These prevalence numbers are a direct challenge to the psychiatric community's credibility, professionalism and veracity in the entire area of transsexualism. They might quibble with the details of my estimates, but they can't escape the order of magnitude of their own error. That community's error of over two orders of magnitude in their estimate of the prevalence of transsexualism is truly egregious.

The obviousness of this error has heightened reactions to the D.S.M.-IVs proffering of incorrect information about transsexualism. Lynn's numbers have been included in the Gender Identity of Colorado's webpage resource for the Reform of Gender Disorders in the D.S.M.-IV, as part of that site's well-reasoned indictment of the psychiatric profession's mis-characterization of transgenderism and transsexualism.

It's also somewhat amazing that the Harry Benjamin International Gender Dysphoria Association (H.B.I.G.D.A.) hasn't ever bothered to do a survey of the number of S.R.S. operations being performed. Even so, the recently released Version 6 of the H.B.I.G.D.A. Standards of Care gives a prevalence estimate as follows: "The earliest estimates of prevalence for transsexualism in adults were 1 in 37,000 males and 1 in 107,000 females. The most recent prevalence information from the Netherlands for the transsexual end of the gender identity disorder spectrum is 1 in 11,900 males and 1 in 30,400 females."

H.B.I.G.D.A. thus continues the methodological errors of the psychiatrists, quoting yet another 'foreign' study based on a subset of the known S.R.S. numbers. But any such study greatly underestimates actual S.R.S. numbers that include many women in stealth, and even more vastly underestimates the much larger numbers of pre-op intense transsexuals in that country.

The bottom line is that transsexualism is most likely to be at least two orders of magnitude more common than previously recognised by the medical community*. This has great implications for the diagnosis and treatment of transsexualism, and for social policies towards people who have this condition.

Lynn Conway

From Lynn Conway's website:  and **Wikipedia:**  Lynn Conway is a famed pioneer of microelectronics chip design. Her innovations during the 1970s have impacted chip design worldwide. Many high-tech companies and computing methods have foundations in her work. She is also a trans woman and activist for the transgender community.



Conway grew up in White Plains, New York U.S.A. and upon learning of the pioneering research of Dr. Harry Benjamin in transgender treatment and realizing that a full gender transition was possible, she sought his help and became his patient. After suffering from severe depression from gender dysphoria, Conway contacted Dr. Benjamin, who agreed to providing counselling and prescribe hormones. Under Dr. Benjamin's care, she began preparing for transition.

While struggling with life in a male role, she had been married to a woman and had two children. Under the legal constraints then in place, post-transition she was denied access to their children. As well, her employer, I.B.M. fired her after she revealed her intention to transition to a female gender role.

Upon completing her transition in 1968, she took a new name and identity, and restarted her career in "stealth-mode", but by 1999, some thirty-one long years of living in stealth, she quietly began "coming-out" having discovered that computer historians searching for the origins of D.I.S., Lynn's earlier world renowned invention, were becoming aware of her early innovative work at I.B.M.. Indeed she suspected that she was about to be outed in the biggest, most public way possible. She began by using her website to inform colleagues, hoping to tell her story in her own words rather than have it just spill out. Her story was then more widely reported in 2000 in profiles in *Scientific American* and the *Los Angeles Times*.

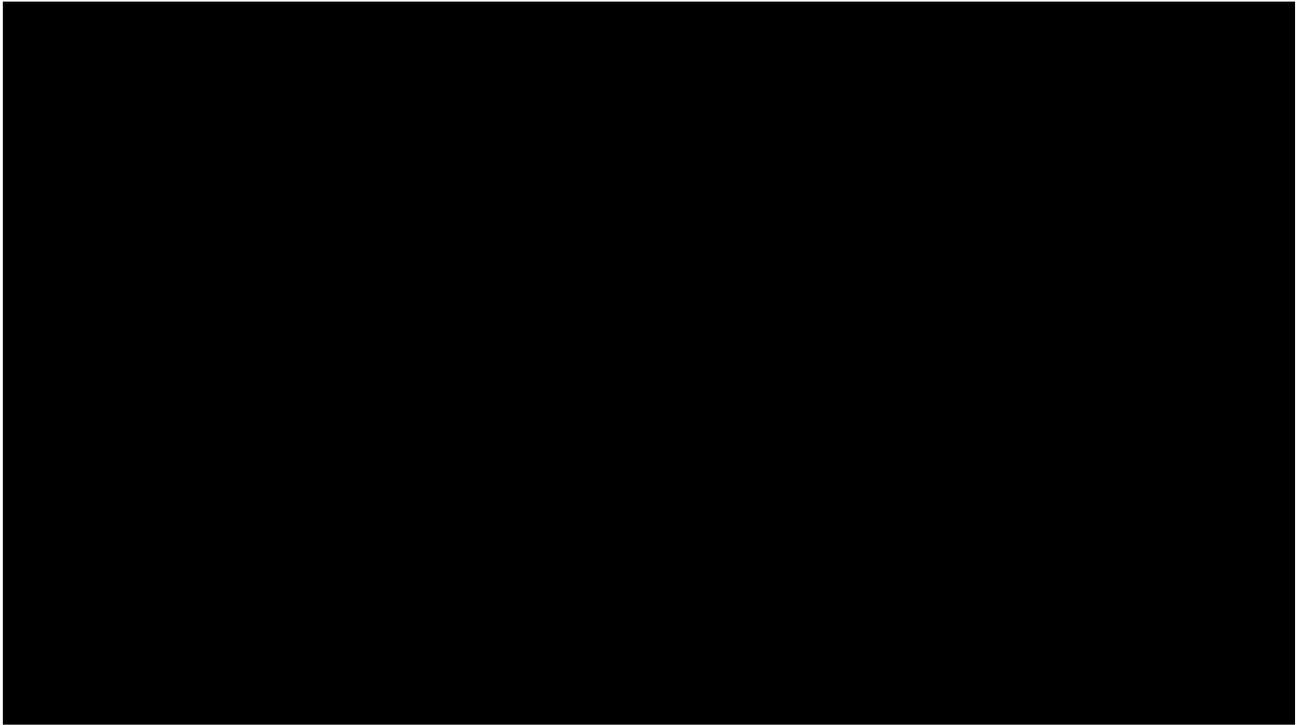
After going public with her story, she began work in transgender activism, intending to "illuminate and normalize the issues of gender identity and the processes of gender transition". She has worked to protect and expand the rights of transgendered people. She has provided direct and indirect assistance to numerous other transsexual women going through transition and maintains a well-known website providing emotional and medical resources and advice. She maintains a listing of many successful post-transition transsexual people, to, in her words "provide role models for individuals who are facing gender transition". Her website also provides current news related to transgender issues and information on sex reassignment surgery for transsexual women, facial feminization surgery, academic inquiries into the prevalence of transsexualism and transgender/transsexual issues in general.

Conway has been a prominent critic of the Blanchard, Bailey, and Lawrence theory of male-to-female transsexualism that all transsexual women are motivated either by feminine homosexuality or autogynephilia. She was also a key person in the campaign against J. Michael Bailey's book *The Man Who Would Be Queen*.

Conway was a cast member in the first all-transgender performance of *The Vagina Monologues*, in Los Angeles in 2004, and appeared in a documentary film about that event entitled *Beautiful Daughters*. She has also strongly advocated for equal opportunities and employment protections for transgender people in the high-technology industry, and for elimination of the pathologisation of transgender people by the psychiatric community.

In 2009, Conway was named one of the "Stonewall forty trans heroes" on the fortieth anniversary of the Stonewall riots by the International Court System, one of the oldest and largest predominantly gay organizations in the world, and the National Gay and Lesbian Task Force.

In 1987, Conway met her husband Charlie, a professional engineer who shares many common interests. They bought a house together in rural Michigan and were married 2002.



Polare Magazine is published quarterly in Australia by The Gender Centre Inc., which is funded by the Department of Family & Community Services under the S.A.A.P. program and supported by the N.S.W. Health Department through the AIDS and Infectious Diseases Branch. Polare provides a forum for discussion and debate on gender issues. Unsolicited contributions are welcome, the editor reserves the right to edit such contributions without notification. Any submission which appears in Polare may be published on our internet site. Opinions expressed in this publication do not necessarily reflect those of the Editor, The Gender Centre Inc., the Department of Family & Community Services or the N.S.W. Department of Health.

The Gender Centre is committed to developing and providing services and activities, which enhance the ability of people with gender issues to make informed choices. We offer a wide range of services to people with gender issues, their partners, family members and friends in New South Wales. We are an accommodation service and also act as an education, support, training and referral resource centre to other organisations and service providers. The Gender Centre is committed to educating the public and service providers about the needs of people with gender issues. We specifically aim to provide a high quality service, which acknowledges human rights and ensures respect and confidentiality.