



Women & alcohol to your health?

By Ann Dowsett Johnston

It's the twilight hour at my corner coffee shop, a crowded café on a wintry evening. The locals are lined up by the till, rosy from the outdoors, ordering their version of liquid perfection. My guest is nursing hers, a low-fat latte—and nursing her thoughts as well, waiting for the crowd to pass before she speaks. “How did I know I had a drinking problem?” She pauses. My guest, a former ad executive, chooses her words carefully. “I knew when I had to switch from red wine to white because the red was staining my teeth. I knew when I began strategizing at parties, choosing the wine that fewer people were drinking, so there would be more for me. And I knew when I started waking up, having blacked out the night before. I'd have to check the fridge to see what was gone. Near the end, I had the shakes in the morning. I'd put a shot of vodka in my coffee.”

She says all this without blinking. A perfectly coiffed and manicured woman in her 50s, comfortable with her story—and yet unwilling to share her real name. Let's call her Jennifer, as she'd like to be known. Daughter of two alcoholics, survivor of an abusive childhood, mother of a grown daughter, she has been sober for more than eight years, thanks, she says, to the fellowship of Alcoholics Anonymous. She spends her free time helping newcomers, women not much older than her daughter, stay sober. Girls who started partying in high school, at university. Young women, who've found they could not stop.

“I think women drink for different reasons than men,” says Jennifer. “Women drink because they're worried, or they're anxious. They drink to calm, and they drink to fit

in, to stay up, or to sleep. Alcohol is a marvellous thing when it works: it will do anything you want it to.” Until when? Until it calls the shots? “There's a line you cross, and you can't go back,” says Jennifer. “And the problem is? No one knows where the line is until they've gone too far. Then comes the soul sickness.”

Jennifer gets together regularly with friends who still drink: at her book club, casual gatherings at restaurants. Does it bother her when others drink in front of her? “No. But I worry. These women are doctors, lawyers. They arrive tense. Two glasses in, they're unwound. Many tell me they're worried, that they've started drinking because they can't sleep. I always think: what happens if they keep this up?”

What does happen if women drink every day? And indeed, how many Canadian women are doing so? This is the question I spent a year investigating, as part of the Atkinson Fellowship in Public Policy. I spent dozens of hours in coffee shops across Canada, speaking to countless women with stories to tell, most of whom came to me through the underground railroad of AA. Their stories are gathered in a small pile of red notebooks. Call them the drinking diaries. Jennifer's story is a typical one: trouble in her past, adult accomplishment, drinking that caught up with her. Then there are the other notebooks, a larger pile. Call them the expert diaries: evidence from scientists and researchers all across North America and beyond.

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What prompted me to do this research? Many factors. I began noticing how often we were being told that drinking was good for us. I began noticing the pink and pretty products in the liquor store, wines with names like French Rabbit and Girls' Night Out. And I began noticing the news reports of girls in Britain, being diagnosed with liver cirrhosis in their 20s.

Walk into most social gatherings, and the first thing you're asked is: “Red or white?” In fact, we live in a culture where knowing a lot about wine is a mark of sophistication. And thanks to media reports of the past several years, we have happily absorbed the news that

drinking has its health benefits. For many, red wine ranks up there with Vitamin D, Omega 3s and dark chocolate. If one glass is good for you, a double dose can't do much harm, can it? Actually, a double dose has its drawbacks. The largest health benefit comes from one drink every two days.

Which begs a simple question: why are we aware of the dangers related to trans fats and tanning beds, and blissfully unaware of the more serious side effects associated with our favourite drug? It's a head scratcher, to say the least.

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In January 2012, a study in the respected journal *Addiction* challenged the broadly accepted assumption that a daily glass of red wine offers protection against heart disease. Says Jürgen Rehm, director of social and epidemiological research at the Centre for Addiction and Mental Health (CAMH) and co-author of the paper: "While a cardioprotective association between alcohol use and ischaemic heart disease exists, it cannot be assumed for all drinkers, even at low levels of intake. The protective association varies by gender: differential risk curves were found by sex, with higher risk for morbidity and mortality in women."

Risky drinking

Alcohol is a carcinogen, and the risks of drinking far outweigh the protective factors. For some time, there has been a clear causal link between alcohol and a wide variety of cancers, including two of the most frequently diagnosed: breast and colorectal. According to a recent study in the *British Medical Journal*, alcohol consumption is directly responsible for one in 10 cancer cases for men, and one in 33 for women. Rehm underscores the fact that very few Canadians are aware that a daily drink increases the risk of breast cancer. Quadruple your intake, quadruple your risk.

When it comes to weekly risky drinking—broadly defined as five drinks or more on at least one occasion in the past week—rates rose significantly between 2003 and 2010 for the following age groups: underage girls, women 25 to 34, those 45 to 54 and 54 to 64. During that same time frame, the rates of risky drinking dropped significantly for young adult males aged 18/19 to 24.

And according to Gerald Thomas, senior researcher and policy analyst for the Canadian Centre on Substance Abuse (CCSA), if the measure were adjusted appropriately for the female gender—namely four drinks at one sitting, rather than five—the increase in risky drinking would likely run 35 to 45 per cent higher across all age groups. Says Thomas, "No-one knows if this upward trend among younger drinkers will translate into a larger number of women with alcohol problems later in life."

Most alarming? These numbers are based on self-reported figures—figures that are way out of synch with what is sold in liquor stores across Canada. Researchers like Thomas know that Canadians under-report what is consumed by roughly 70 per cent.

If you account for what is bought in Canada, we currently drink 8.2 litres of pure alcohol per person over the age of 15, on average, on an annual basis. Our consumption is more than 50 per cent above the world average, and there is a growing convergence between consumption rates for men and women.

In fact, alcohol consumption is on the rise in much of the world, and in many countries, female drinkers are driving that growth. "Women who are now in their 40s and 50s have a very high risk in terms of heavy drinking, and weekly drinking," says Katherine Keyes, a post-doctoral fellow at Columbia University in New York and co-author of a recent study in *Alcoholism: Clinical & Experimental Research*. Having reviewed 31 international studies of birth-cohort and gender differences in alcohol consumption and mortality, she and her fellow authors concluded that younger groups, especially female, were increasingly at risk for developing alcohol-related disorders. "Those born between 1978 and 1983 are the weekend warriors, drinking to black out. In that age group, there is a reduction in male drinking, and a sharp increase for women."

Most importantly, the study points to the critical role of societal elements in creating a drinking culture. "Traditionally, individual biological factors have been the major focus when it comes to understanding alcohol risk," says Keyes. "However, this ignores the impact of policy and environment." The one protective factor for women? Low-status occupations. "Those in high-status occupations, working in male-dominated environments, have an increased risk of alcohol use disorders."

"This is a global trend: the richer a country, the fewer abstainers, the more women drink, and the smaller the gap between men and women," says CAMH's Rehm. "The new reality is that binge drinking has been increasing,

especially among young adults, in modern high-economy countries—and women are largely responsible for this trend.”

Says Keyes: “We’re not saying go back to the kitchen and put down the sherry. But when we see these steep increases, you wonder if we are going to see a larger burden of disease for women.”

Drug of choice

Both male and female Canadians choose alcohol as their drug of choice, and it’s lucrative—if you only look at one side of the ledger. In 2010, alcohol sales totalled \$19.9 billion. However, the direct alcohol-related costs for healthcare and enforcement exceed the direct revenue from alcohol in most jurisdictions. “More than 80 per cent of our population over 15 drinks,” says Rehm, “which causes a lot of death. An average alcohol-related death is under 55—and that means it’s a combination of cancers, heart disease and injuries. By drinking, people are setting themselves up for morbidity and mortality issues.”

When it comes to alcohol, we live in a culture of denial. With alcoholics representing roughly two per cent of the population and more than 80 per cent of us drinking, it’s the widespread normalization of heavier consumption that translates to a national health burden. The top 20 per cent of the heaviest drinkers consume 73 per cent of the alcohol in Canada.

Episodic binge drinking by a large population of nondependent drinkers has a huge impact on the health and safety of the community. That larger group is well represented in the numbers missing work, getting injured or being hospitalized. When compared to those who drink moderately, risky drinkers are more than 12 times as likely to report significant harms, ranging from violence to car accidents. Says the pragmatic Rehm, who is not a prohibitionist by any stretch of the imagination: “A lot of hospital waiting lists would not exist if we eliminated alcohol in our society.”

Most understand the major role that chronic alcohol abuse plays in family disruption, violence and injury, disability, illness and death. But women have many other physical vulnerabilities when it comes to drinking. “Hormonally, metabolically, men and women are different—and this has implications for tolerance and physical impacts over the long run,” says Dr. Joseph

Lee, chief physician of Hazelden’s Center for Youth and Families in Plymouth, Minnesota.

Women’s vulnerabilities

Women’s vulnerabilities start with the simple fact that, on average, they have more body fat than men. Since body fat contains little water, there is less to dilute the alcohol consumed. As well, women have a lower level of a key metabolizing enzyme—alcohol dehydrogenase—which helps the body break down and eliminate alcohol. As a result, a larger proportion of what women drink enters the bloodstream. Furthermore, fluctuating hormone levels mean that the intoxicating effects of alcohol set in faster when estrogen levels are high.

The list goes on. Women’s chemistry means they become dependent on alcohol much faster than men. Other consequences—including cognitive deficits and liver disease—all occur earlier in women, with significantly shorter exposure to alcohol. Women who consume four or more alcoholic beverages a day quadruple their risk of dying from heart disease. Heavy drinkers of both genders run the risk of a fatal hemorrhagic stroke, but the odds are five times higher for women.

Depending on a woman’s stage in life, there are specific considerations of which to be aware. If you’re female and adolescent, this is your brain on alcohol: consume four drinks, and you will leave yourself vulnerable to compromising your spatial working memory. Binge drinking in adolescence can interrupt normal brain cell growth, particularly in the frontal brain regions critical to logical thinking and reasoning. In short, it damages cognitive abilities—especially in female teens. Says researcher Lindsay Squeglia, lead author of a new study in *Alcoholism: Clinical & Experimental Research*: “Throughout adolescence, the brain is becoming more efficient, pruning. In female drinkers, we found that the pre-frontal cortex was not thinning properly. This affects executive functioning.”

“Are the girls trying to keep up with the boys?” asks Edith Sullivan, a researcher at Stanford’s School of Medicine. “Quantity and frequency can be a killer for novice drinkers. Adding alcohol to the mix of the developing brain will likely complicate the normal developmental trajectory. Long after a young person recovers from a hangover, risk to cognitive and brain functions endures.”

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Trauma

Sullivan, who has done a lot of work with the brain structure of alcoholics, is certain that what is known as “telescoping” is real: “As they develop alcoholism, women seem to develop dependence sooner than men. Drink for drink, it is worse for females.”

Gender is a strong predictor of alcohol use. So too is trauma. One groundbreaking project is GENACIS—Gender, Alcohol and Culture: An International Study. With 40 participating countries, including Canada, this project offers an extraordinary opportunity to improve our understanding of how gender and culture combine to affect how women and men drink. Sharon Wilsnack, who oversees the GENACIS project, is also the lead author of the world’s longest-running study of women and drinking, the National Study of Life and Health Experiences of Women. Between 1981 and 2001, she and her team interviewed the same women every five years. One of their findings: the strongest predictor of late onset drinking is childhood sexual abuse. Says Wilsnack, “It has an increasingly adverse pattern over the course of women’s lives.”

“The central question isn’t, ‘What’s wrong with this woman?’ It’s, ‘What happened to this woman?’” This is the voice of Nancy Poole, director of research and knowledge translation at the British Columbia Centre of Excellence for Women’s Health. With more than 30 years’ experience in the field of addictions, Poole is a dynamo with her finger in dozens of projects, including a new book on trauma. She is talking about the importance of what is known in the field as trauma-informed care, which gives credence to the woman’s past or present, and the role it plays in her addiction. “We miss the biggest part of the story,” says Poole, “if we don’t link the addiction to the rest of the woman’s life.”

If you head to the most renowned of all treatment centres, Hazelden outside Minneapolis, you will hear a similar story. Brenda Servais is a counsellor for 16- to 21-year-olds, and she is blunt: “Trauma? Not 100 per cent, but a very high number. There’s a lot of sexual trauma, whether it happened when they were sober or under the influence. A lot of rape. Certainly PTSD. And we can see a rise in their substance use right after the event.”

“Pinking” the market

One thing is undeniable: women have become a significant target market for the alcohol industry. Just consider the

names: Mike’s Hard Pink Lemonade. Smirnoff Ice Light. Wines like MommyJuice and Stepping Up to the Plate (with a label sporting a very high heel). Berry-flavoured vodkas. Vex Strawberry Smoothies. Coolers in flavours like kiwi mango, green apple, wild grape.

Women’s buying power has been growing for decades, and their decision-making authority has grown as well. What these labels are battling for is women’s downtime—and their brand loyalty.

When did the alcohol market become so pink, so sweet, so female-focused? David Jernigan has spent his career watching the industry. Executive director of the Baltimore-based Center on Alcohol Marketing and Youth, he cites the mid- to late 1990s as the period when the spirits industry began to target women. Beer had ruled North America: beer was fun, beer was sports. The spirits industry was languishing, seen as stodgy and boring. Suddenly, it decided to play catch up.

“They became incredibly aggressive at growing the market,” says Jernigan. “They looked at who was underperforming, and of course, they saw women. For them, this was a global opportunity.”

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Thus was born the alcopop. Also known as the cooler, “chick beer” or “starter drinks”—sweet, brightly coloured vodka- or rum-flavoured concoctions in ready-to-drink format. “They’re the anti-beer,” says Jernigan, “drinks of initiation, cocktails with training wheels. They’re the transitional drinks, particularly for young women, pulling them away from beer and towards distilled spirits. Getting brand loyalty to the spirits’ brand names in adolescence, so that you get that annuity for a lifetime that beer marketers like to talk about. An obvious product for reaching this wonderful and not yet sufficiently tapped market of young women.”

Is Carrie Bradshaw, the Sex and the City character played by Sarah Jessica Parker, to blame for the martini-shots-vodka culture? Can it all be laid at her Jimmy Choos? “Let’s put it this way,” says Jernigan. “We cannot discount Carrie Bradshaw. But if Carrie Bradshaw hadn’t been accompanied by a push by the spirits industry, she would have been a pebble in the pond. As it was, she was a boulder. Women had never been targeted before in the way they were targeted: after alcopops came distilled spirits’ line extensions—flavoured vodkas, absolutely every fruit you could imagine.”

“In the past 25 years, there has been tremendous pressure on females to keep up with the guys,” says Jernigan. “Now, the industry’s right there to help them. They’ve got their very own beverages, tailored to women. They’ve got their own individualized, feminized drinking culture. I’m not sure that this was what Gloria Steinem had in mind.”

Women and drinking: the marketing is undeniable—and so is the stigma. Just ask “Jennifer.” In fact, of all the women I interviewed for the “drinking diaries” during the past year, only three brave individuals chose to go public in my series of articles for The Toronto Star.

Stigma

When I asked each interviewee if they would rather be known as a depressive or an alcoholic, not one person chose the latter. It turns out their instincts were good. My series of articles drew an overwhelming response, and a large proportion was positive, empathetic to the stories of addiction and recovery. My mailbox overflowed with encouraging messages: the series “should be required reading in every school in the country ... Don’t stop writing!”

But on the web, there were other voices. “Addiction is not a disease,” wrote one person. “It’s a personal lifestyle choice ... people need to be held accountable for the choices they make ... let’s stop pampering them and justifying their behaviour by putting nice little disease labels on it.”

“Alcohol and drugs are the means for people who lack intestinal fortitude to face trauma,” wrote another. “Stop glorifying addictive personalities and making excuses for lack of courage.”

More than one reader argued back: “So, you say alcoholism isn’t a disease? So it’s the alcoholic’s fault? ... We would love to be able to enjoy a drink or two responsibly without any incident. Unfortunately, this is not the case ... Ignorance may be bliss, but it is definitely counterproductive.”

Is alcoholism a disease? Peter Thanos says yes. A neuroscientist at the U.S. Department of Energy’s Brookhaven National Laboratory on Long Island, N.Y., Thanos is blunt: “We have known for more than 20 years that alcoholism is a chronic, relapsing brain disease. Science supports this truth.”

Patrick Smith, former vice-president of clinical programs at the Centre for Addiction and Mental Health and new CEO of Toronto’s Renascent treatment centre, is also blunt: “The jury is in. The Canadian Medical Association calls it a disease. The American Medical

Association calls it a disease.”

Smith believes social drinkers have a difficult time understanding the physiological realities of alcohol dependence. “It’s not part of their lived experience,” he says. “Still, no one says: ‘Just because I don’t have diabetes, it doesn’t exist.’”

Why do so many still see addiction as a moral failure? Why such stigma?

Reader T. J. Harrison, an alcoholic, wrote of the “shame that attaches to the label ... an alcoholic woman is just a blowsy, sloppy object of mockery, dismissed as vulgar, unladylike and worse.”

Says Nancy Black, director of concurrent disorders at St. Joseph’s Care Group in Thunder Bay: “Addiction is so far into the shadows because of stigma. It’s viewed as an issue of bad choices, wilfulness or lack thereof. Mental health has had national leadership on anti-stigma, and addiction needs a similar national response. But the voices are silent.”

She’s right. When it comes to leadership, mental health has had any number of prominent advocates, most notably former federal finance minister Michael Wilson. For years, Wilson has spoken about the death of his son, Cameron, by suicide. Over time, many families have joined him with their own stories of loss.

Addiction needs the same advocacy: prominent individuals who are willing to own the issue. We’re long overdue for an anti-stigma campaign. People overcome addiction. They get well. They need to speak up, and they need to be heard.

Who will play the Michael Wilson role? Who will play the supporting roles? With a convergence of voices, so much could be won. I look forward to the day when “Jennifer” might speak to me, on the record, using her real name.

And I look forward to a time when market-friendly governments pay more attention to the true costs of alcohol-related issues. Take the treatment system. When it comes to a fully integrated treatment network, the essential structure is missing in Canada. Seeking help? Too often, it’s a matter of where you live or who you know. The attention paid to problematic substance use is inadequate; the dedicated services are poorly funded and badly co-ordinated. Says Black in Thunder Bay: “The infrastructure built 20 years ago is not sufficient to meet the challenges today. Each system is doing their best, but there is no co-ordinated, integrated response to this social need. And there is no mandate for action. We need an injection of resources.”

A hot potato

Politically, alcohol is a hot potato: who wants to take the fallout for fiddling with our favourite drug, or the issues surrounding it? Very few, it would seem. Only two provinces have alcohol strategies in place: Alberta and Nova Scotia.

The good news? Late last year, Canada's first national low-risk drinking guidelines were given the green light. Says Michel Perron, CEO of the Canadian Centre on Substance Abuse, which oversaw the shaping of the guidelines: "If a country has a \$14 billion-a-year problem, and much of it stems from the use of a legal product, the first step is to explain how the product can be used, and how to decrease that avoidable cost."

More than two years in the shaping, the guidelines are significant because they were the first priority of the National Alcohol Strategy, an intelligent blueprint which has yet to be fully endorsed by the federal government. The strategy was shaped in 2007 by an expert working group convened by the CCSA, Health Canada and what was then known as the Alberta Alcohol and Drug Abuse Commission. This group, together with representatives from public health agencies, alcohol manufacturers, treatment agencies and alcohol control boards, produced the report "Reducing Alcohol-related Harm in Canada: Towards a Culture of Moderation." This was a milestone effort, presenting 41 recommendations.

Canada has more than its fair share of brilliant researchers working on the alcohol file. Arguably, the best known is CAMH's Rehm, and he minces no words. He cites a long list of countries that have made alcohol policy a priority: Sweden, Thailand, France, South Africa and Ireland, to name a diverse few. Says Rehm: "When you consider the science, alcohol is doing the most harm in our society. Unless we start seeing leadership on alcohol policy, our life expectancy will decrease compared to other countries. We should move on taxes,

on pricing, on advertising, on the general availability of alcohol. Canada is missing the boat on alcohol."

Make no mistake: this is a public health issue, and it's crying out for true leadership. One key area: we're just beginning to understand how differently women respond to alcohol. Historically, women have consumed less than men. For that reason, we have considered them less at risk. Alcohol affects women's bodies differently, and we need to use sex-specific criteria for calculating risk. We need to reframe the research agenda on this subject. All regional and national alcohol surveys need to use sex-specific criteria for monitoring risky drinking, which translates to four or more drinks on any one occasion for women. We need to invest in sex and gendered research.

Meanwhile, given the high rates of risky drinking by underage girls, we need research that helps with this problem. Says Poole: "We need to understand what supports are needed to delay their uptake of alcohol use. Some international research shows interventions that may be helpful, ones that address such protective factors as computer-based interventions, all-girl groups and programming that helps girls critically analyze media messages. It is the issue affecting girls' health, and it's going sideways--especially for those 13 to 15. And it's being marketed as girls' liberation!"

Wilsnack, who oversees the GENACIS project, believes we are now witnessing a "global epidemic of women's drinking." Her greatest concern? Women in developing countries. "The highest risk is for the higher educated women in lower resourced countries. We need to design targeted intervention and tie it into the empowerment of women. If women can develop a means of enjoying alcohol in a healthier, low-risk manner, then we have succeeded."

Ann Dowsett Johnston is an award-winning Canadian journalist, living in Toronto. Most recently, she was the recipient of the Atkinson Fellowship in Public Policy 2011, focusing on Women and Alcohol.

Resources:

Canadian Centre on Substance Abuse (CCSA) - www.ccsa.ca

Alcohol Policy Network (APOLNET) - www.apolnet.ca

Coalescing on Women and Substance Use, website on trauma-informed services sponsored by the BC Centre of Excellence for Women's Health - www.coalescing-vc.org/virtualLearning/section1/trauma-informed-services/web-links.htm

Blog: Girls, Women, Alcohol, and Pregnancy - <http://fasdprevention.wordpress.com/>