The Beat - Episode 1 Final Transcript

What's putting women at risk?

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[00:00:19] **Caroline** I'm Caroline Lavallée, and you're listening to The Beat, a podcast by Heart & Stroke, with support from our generous donors. Thanks for listening. Now let's get into the episode. Hi, everyone.

This is Caroline. It's so good to be back with you for a new season. I'm delighted that Deborah Cox, an amazingly talented singer, songwriter and actor, will be our special guest host for this episode. Deborah has joined Heart & Stroke to help build awareness around women's heart and brain health. This is an important topic for Deborah, and I'm sure the information she helps present will make it an important topic for you too.

[00:01:05] **Deborah Cox** Hi everyone! This is Deborah Cox. I'm honored to be your special guest host for this episode of The Beat. Heart disease has affected women I love, women in my own family. Thankfully, they received the treatment they needed, but that's not always the case. Today, I'd like to share the story of a woman named Christina Stuwe. Like many women with heart disease, Christina spent years being misdiagnosed. So it makes you wonder, how does this happen? And why is there still so much to learn about women's heart and brain health? It's complex. But one thing is clear, women are not the same as men. I was troubled to learn that heart disease and stroke are the number one cause of premature death for women in Canada. And women who live with these conditions often have far worse outcomes than men. So this episode is for anyone who identifies as a woman. It's for anyone who has a woman in their life. Because I believe that by increasing awareness we can save more women's lives and that benefits everyone.

In 2017, Christina Stuwe was at home in Calgary watching cartoons with her son.

[00:02:29] **Christina Stuwe** My heart felt like it was pounding out of my chest and I knew that something was up. I decided to have my husband take me to the walk-in clinic. I told them it felt like I was having a heart attack. I didn't know what a heart attack felt like. It just would not settle down. So they did a blood test. They did an ECG. And they realized that my heart rhythm was off.

[00:03:01] **Deborah Cox** At the clinic, the doctors asked Christina to wear a 24-hour heart monitor, but the results were inconclusive. Her family doctor referred Christina to a cardiologist who ordered a stress test and an electrocardiogram.

[00:03:16] **Christina Stuwe** It was the most important test to this point because it identified that the lower left ventricle of my heart was beating at 35 percent instead of the normal, expected 55 percent. Why would my heart do that? And the cardiologist, he didn't really have an answer.

[00:03:38] **Deborah Cox** The electrocardiogram results showed something was wrong with Christina's heart, but the cardiologist was not really concerned. He suggested a follow-up appointment one year later. Cristina and her husband, Sven, were not satisfied with that plan.

[00:03:55] **Christina Stuwe** My husband and I looked at each other and like, no way. I was getting quite emotional at this point because I had just found out that my heart wasn't working properly. I kind of knew that. I had tried to hold it together, but I just couldn't do it anymore. Sven took the reins and just said, "Look, we're not leaving until you can give us the test that tells us exactly why her heart is doing this".

[00:04:20] **Deborah Cox** So the cardiologists sent Christina for an angiogram, a test that uses X-rays and dye to examine blood vessels around the heart. But why did she have to struggle to get that test? There's no simple answer. But we know that half of women who experience a heart attack have their symptoms go unrecognized. Women are often misdiagnosed and less likely to receive treatment and medications they need in a timely way. But doctors and other health professionals don't want to practice bad medicine. Many simply are not aware that the care they provide women sometimes falls short. This is Dr. Karin Humphries.

[00:05:01] **Dr. Karin Humphries** I'm an associate professor emeritus at the University of British Columbia in the Department of Medicine and the Division of Cardiology. For far too long, heart disease and stroke had been viewed as a man's disease, not as a woman's disease. I think we've made huge strides in understanding that it affects men and women, and indeed women are more likely to die of cardiovascular disease than any other conditions. We have made some progress in that area, but there are still areas where we are weak, and that is really understanding the unique risk factors that only women face.

[00:05:42] **Deborah Cox** The lack of understanding about women's heart and brain health can be traced back to research gaps. Two thirds of heart disease and stroke research has been focused on men. When women are included in clinical trials, an analysis on sex and gender is not always done. But we know that women's bodies are not the same as men's, and neither are their lives. One obvious difference is a woman's life cycle.

[00:06:06] **Dr. Karin Humphries** There are two key points in the reproductive life cycle that have the greatest impact on the risk of heart disease and stroke. The first is during pregnancy, which you could think of as kind of a stress test of the cardiovascular system in the sense that it increases blood volume, blood pressure and heart rate. So in many ways, it really mimics what a doctor does when he or she undertakes an exercise stress test. The second key point in the reproductive life cycle is menopause, and that's when the estrogen levels drop. And remember, we know that estrogen is protective with respect to cardiovascular disease and those levels then decline. So that's another key point in the overall reproductive life cycle.

[00:06:58] **Deborah Cox** When Christina was 37 years old, she was pregnant with her son and late in the pregnancy there were some complications.

[00:07:06] **Christina Stuwe** So we went into the doctor's office and I was told at that point, after some of the routine checks and tests, that I had gestational diabetes and I also had gestational hypertension.

[00:07:22] **Deborah Cox** Gestational hypertension is the term for high blood pressure in a pregnant woman. Dr. Humphries explains how these conditions, along with another one called pre-eclampsia, are red flags.

[00:07:34] **Dr. Karin Humphries** Now, these are both conditions that will resolve after the baby is delivered. But the pre-eclampsia, the gestational hypertension and the gestational diabetes put you at increased risk for developing hypertension later on in life and also for developing full blown diabetes. And those are major risk factors for cardiovascular disease.

[00:07:59] **Deborah Cox** Learning that she had gestational hypertension and gestational diabetes was a very difficult experience, both emotionally and physically for Christina.

[00:08:09] **Christina Stuwe** You know, what happened for me is that the hypertension and the diabetes disappeared the minute my son was born. I was elated by that. The only "but" I got from the obstetrician was, "So because you've had gestational diabetes, you may be prone to having diabetes when you're older, so make sure you watch your sugars". And that was the only advice I was given.

[00:08:36] **Deborah Cox** What Christina didn't know was that because she had gestational hypertension, she would also be at a high risk of high blood pressure in the future. And that means higher risk of heart disease and stroke.

[00:08:51] **Dr. Karin Humphries** The pregnancy really is a stress test and it's indicating that your system is already experiencing problems with regulating your blood pressure, with regulating your blood glucose. So it's like an early warning sign that things are not working optimally. So if you do have these complications during pregnancy, your physician and you really have to pay attention to this and make every effort to reduce the risk that you will ultimately develop full blown hypertension and full blown diabetes later in life, because these are such important risk factors for heart disease and stroke.

[00:09:31] **Deborah Cox** Fast forward ten years after her pregnancy. Christine's racing heart had her searching for answers. Nobody asked her if she had experienced any complications during her pregnancy and she didn't think to tell anyone. The next step was the angiogram test. Christina feared the worst because heart disease had a history in her family. When Christina was in her twenties, her father had quadruple bypass surgery. Unfortunately, the angiogram confirmed her biggest fear.

[00:10:06] **Christina Stuwe** I had three arteries that were majorly blocked. One that was 100 percent blocked completely. And had been for about three years, which equated to a heart attack when I was 44. I also had another artery which is called the widowmaker that was 70 percent blocked. And then I had a third artery that was 80 percent blocked. And then up a bit higher, it was 90 percent blocked. So I was told on that day that I would have to have a triple bypass and it would have to be by open-heart surgery. It was crushing. All I could do was cry. I mean, I was relieved that I knew what was wrong. But I was terrified because my biggest fear in my entire life was having open-heart surgery like my dad had.

[00:11:10] **Deborah Cox** While she was afraid, Christina finally understood what was causing her heart symptoms. The diagnosis also explained pain and burning that she'd been experiencing in her upper back and arms for more than two years. She was told this pain was likely a nerve issue, so never linked it to her heart. Finally, four months later, Christina had bypass surgery.

Although complications are usually identified during pregnancy, it is after the pregnancy, when Dr. Humphries believes more needs to be done to support women like Christina.

[00:11:47] **Dr. Karin Humphries** The problem is that when these things (the pre-eclampsia, the gestational hypertension and the gestational diabetes) resolve — which they do — we just don't follow up any more. And as a matter of fact, most women — close to all women — as they go in and see their GP for regular checkups, that question of "did you experience any complications during pregnancy" rarely arises. It needs to become part of the assessment of women's risk of heart disease and we're not doing a good job of that. That's really where we're falling down, not the diagnosis of those conditions during pregnancy, but the understanding that this is a harbinger for future issues and that we should be intervening to reduce that risk.

[00:12:36] **Deborah Cox** What if Christina had known about the future risks linked to her pregnancy complications?

[00:12:42] **Christina Stuwe** I would have had the knowledge and the awareness to ask more questions, to ask for follow-up. I would have been very proactive in my future health because of knowing that.

[00:12:59] **Deborah Cox** Pregnancy is not the only time when a woman's reproductive cycle puts her at higher risk of heart disease and stroke. Menopause is also significant.

[00:13:08] **Dr. Karin Humphries** Menopause affects a woman's cardiovascular health in many ways because of the hormonal change. And we know that estrogen is protective. That's why we have seen lower rates of cardiovascular disease in younger women. But as we go through menopause, our estrogen decreases and that, in addition to aging, then shows up in increasing risk factors. So specifically, what we see after menopause is elevations in cholesterol, elevations in triglycerides (that's another form of blood fats), increases in blood pressure, weight gain and changes in insulin and glucose, which then impact, of course, the risk of diabetes. Now it's both the menopause and also the aging that are driving these adverse changes that increase a woman's cardiovascular risk.

[00:14:04] **Deborah Cox** Some women experience early menopause, and when estrogen levels decrease at a younger age, there are still risks.

[00:14:11] **Dr. Karin Humphries** Early menopause means you're reducing that protective estrogen very early in life. Now, this is true whether you go into early menopause naturally, which some women do, but you can also go into menopause due to surgery, and that would be as a result of oophorectomy, which means the removal of your ovaries.

[00:14:32] **Deborah Cox** Even young women with normal estrogen levels are at risk, but they are often misdiagnosed.

[00:14:39] **Dr. Karin Humphries** So the other issue with young women is they have much worse outcomes. They're more likely to die. Even if they recover, they have residual damage to their hearts. And when I say they have worse outcomes, it's worse relative to young men. It's even worse relative to older women. And of course, if you're misdiagnosed, you don't get the appropriate treatment. Sadly, even if you are appropriately diagnosed, women are still undertreated, both with procedures and also with evidence-based medications. Women are much less likely to go to cardiac rehab. And even if they go to cardiac rehab, they don't often complete the entire course, which men are much more likely to do. Because, remember, cardiac rehab also very much improves the outcome for whoever takes it. But women, sadly, are referred less, attend less, and even if they do attend, they don't complete the entire course.

[00:15:36] **Deborah Cox** With so many risks related to a woman's life cycle, what is being done to prevent and treat heart disease and save more lives?

[00:15:44] **Dr. Karin Humphries** There's so much evidence coming out now that women are underdiagnosed, that women are undertreated, and therefore they have worse outcomes. It wasn't that long ago that research would be funded that was just looking at men in heart disease. That doesn't happen anymore. The Canadian Institutes for Health Research, the Heart & Stroke Foundation, all now have strict policies that they will only fund research that looks at both men and women.

[00:16:12] **Deborah Cox** Clinical trials also need to include more women.

[00:16:16] **Dr. Karin Humphries** The clinical trials were really designed for populations of men. If you had a follow-up during the week, that didn't become a big issue for a man to come back to the clinic and have his follow-up visit. So think of a middle-aged woman who probably holds down a job, is looking after her children and may even be looking after elderly parents. So imagine all of that going on in her life and you want her to show up at 3:00 on a Friday afternoon for a clinic visit? It's really not feasible. So we need to proactively say, "we would like to include you in this trial. And to make it easier for you, we're very open to having clinic visits on the weekend. Some clinic visits we can do remotely. We're providing child care if you need child care". So we need to address the barriers that women face so that they are more likely to participate in a clinical trial.

[00:17:13] **Deborah Cox** With more targeted research, healthcare professionals will then need to put that knowledge into practice.

[00:17:19] **Dr. Karin Humphries** Of course, it takes not just the generation of knowledge about how women may differ from men, but we also have to apply it. And that application of the knowledge is one thing that I think still needs a lot more attention. It's not just this issue, you know, moving evidence into practice. So we say from the bench to the bedside has always been a challenge. There's usually a huge delay. But again, we are making progress because we're tackling it from many perspectives, increasing the awareness of women, sharing with women the sort of questions that they need to ask of the healthcare providers to ensure that they get the best possible care. We're changing the way we train our healthcare professionals, increasing their knowledge of sex and gender differences in cardiovascular disease, both heart disease and stroke.

[00:18:14] **Deborah Cox** Despite the risks around the stages of a woman's life cycle, we can all try to make healthy lifestyle choices at any age. The choices we make in our younger years can really help us later in life.

[00:18:27] **Dr. Karin Humphries** It's not about suddenly becoming healthy as you get older. Hopefully it's during your entire life, even when you're young. And by that I mean don't take up smoking at all, exercise, make healthy food choices and as much as possible reduce your risk of stress because all of these things will eventually contribute to an increased risk of cardiovascular disease, especially later in life.

[00:18:54] **Deborah Cox** Christina shared advice for the women out there that might be experiencing signs and symptoms.

[00:18:59] **Christina Stuwe** Don't doubt yourself. You are your own best judge, if something is wrong with you. You need to listen to "you". And you need to stand your ground. And if that means that you have someone who holds your hand and helps you and backs you up while you stand your ground, then I think that's the best piece of advice I can give.

[00:19:28] **Deborah Cox** The gaps in awareness, research, diagnosis and care threatened women's heart and brain health. It's not enough to ask women like Christina to advocate for themselves. We need to change policies, systems, attitudes and behaviours, if we want to save more women's lives. In Canada, we are fortunate to have researchers like Dr. Humphries lead the way. With better funding and research, we have a chance to provide women with better screening, education and follow-up throughout the stages of life. And with that, we can reduce the risk of women's heart disease and stroke, which will benefit everyone. If you want more information and

to read our new report, be sure to visit heartandstroke.ca/women.

Thank you, Christina, for sharing your story. And thank you, Dr. Humphries, for offering your expertise. I hope you enjoyed this episode. Stay tuned for stories of blood pressure, cardiac arrest and the heart brain connection.

[00:20:26] **Caroline** Thanks for listening to The Beat, and a special thanks to our donors for making this podcast possible. I hope you'll take away some valuable insights from today's episode and maybe you'll be inspired to join a community that's determined to beat heart disease and stroke. Subscribe now to stay informed, get inspired and rediscover hope. Don't forget to rate and review the podcast so we can reach even more listeners. Stay tuned for our next episode. Until next time, I'm Caroline Lavallée.

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