

Olivia Barata Cavalcanti:

Obesity is not the result of lack of discipline or willpower. It's a complex and chronic disease that is caused from different factors and we have no control over. I would like for people to have less judgment and more empathy for people living with obesity and for governments to take action to protect their citizens and introduce regulation around ultra-processed food and provide better and affordable access to health care and healthier environments.

LuAnn Heinen:

The voice you just heard is Olivia Barata Cavalcanti, Doctor of Public Health. She's director of science and programs at the World Obesity Federation and my guest on the podcast today. Born in Rio de Janeiro Brazil, Olivia was educated in the U.S., has worked in Maputo, Mozambique, Rome, Italy, and New York City, and now works with a UK based team in London. That, and the fact that English is her third language, makes Olivia a global citizen in my book. We're fortunate to have her expertise to discuss the worldwide obesity epidemic.

I'm LuAnn Heinen and this is Business Group on Health podcast, conversations with experts on the most important health and well-being issues facing employers. Today I have the pleasure of speaking with Olivia Barata Cavalcanti to discuss the worldwide obesity epidemic.

Thank you for joining us today.

Olivia Barata Cavalcanti:

Thank you for having me.

LuAnn Heinen:

We're here to talk about obesity worldwide and the data are stunning. From what I've seen, worldwide obesity has tripled in the last 50 years and something like 2 billion adults are overweight, 660 million people worldwide are living with obesity, and most of the world's population is living in countries where overweight and obesity kill more people than underweight. This is such a big change in just a couple of generations. Is essentially every country on the path to increased prevalence of obesity?

Olivia Barata Cavalcanti:

Unfortunately, yes. Not only every country is having increased risk of obesity, but they're getting there faster and faster. It's really concerning not only among adults, but also among children. As obesity used to be a disease of high-income countries, we're now seeing that it's actually affecting pretty much everyone in the world and is rising at a faster rate among middle income countries. So it is a worldwide problem.

LuAnn Heinen:

Are there any countries reversing the trend at this point in time?

Olivia Barata Cavalcanti:

No, unfortunately no one is not even close to reversing the trend. We have seen some cities or counties, specific locations that have been able to either plateau childhood obesity rates or slightly decrease them for few years, but those are very specific places. We haven't seen anything at a national level.

LuAnn Heinen:

Even among all the countries where obesity is increasing, there's still variability in the rate of increase. I know that your organization, the World Obesity Federation has pretty terrific data by country and gender. I noticed that the country at the healthiest weight was Vietnam. When you look at women, just 3% have obesity. Then there's Japan only 4% of women, but at the other end of the spectrum, American Samoa ranks number one in the world with 65% obesity rates among women. And of course the U.S., near the top of the charts, about 36% of men and 38% of women with obesity. It looked to me like it's pretty much the Pacific Island countries with

higher rates of obesity than the United States. Can you explain why places like Nehru and Micronesia, Tonga, Fiji, those Island countries are experiencing obesity among nearly two thirds of their population?

Olivia Barata Cavalcanti:

Yes, before doing that I just need to take a step back and say that for example, Vietnam, although yes, it is true that they have a smaller percentage of obesity prevalence, it is also true that they are one of the countries with the most rapid rise in obesity prevalence in the latest years. Just to say, a lower number, a lower prevalence of obesity now, unfortunately doesn't mean much for the future. Going back to the Pacific Islands, there's definitely a part of it that is just the diet. You know, the introduction of Western diets to the islands has really changed the way that the people there eat. Where the traditional foods of the islands used to be fresh fish, meat, local fruits, and vegetables, they have been largely replaced now by sugar, rice, flour, canned meats, canned fruits, and soft drinks. Those foods are energy dense and nutrient poor, meaning that they are really not adding anything in terms of nutritional value, but they are very heavy in calories. That's one major factor. Another hypothesis as some researchers consider the thrifty gene hypothesis, so the idea that Pacific Islanders, because they used to have very long journeys so their bodies had to be strong and efficient enough to store that kind of energy for a long journey, that genetic composition remained among that population so they tend to kind of store fat for those long journeys. That's one of the hypothesis, but definitely the kind of food that we see there is one of the main reasons. That's what we're seeing also in the United States. It is a place with an obesogenic environment and so we are going to see obviously high rates of obesity.

LuAnn Heinen:

I didn't realize that Pacific Islanders have imported food. As far away as they are, the obesogenic environment comes to them.

Olivia Barata Cavalcanti:

Yes, because unfortunately the way that we're producing our food right now is much cheaper, in a way, and more convenient. We have seen reports of fishermen in the islands trading their fresh feed for money to then buy canned tuna. It doesn't make a lot of sense to us, but we also need to understand the culture, what it means to have the different kinds of food. I can talk even just personally about my experience. I grew up in Brazil. When I was a child, to go to a McDonald's was kind of a big deal, because it was American. So it has a status attached to it. Food is a very complex issue. It's not only about the nutrition that we're putting inside our body. It has different meanings, it has different values, and it goes beyond the individual. I'm not an expert in Pacific Islands, but definitely they had that food transition and unfortunately they're suffering for it now.

LuAnn Heinen:

What do you see in South America? What are the cultural changes there and how has that affected obesity in the last generation?

Olivia Barata Cavalcanti:

Very similar, like the rest of the world. There is a rapid move of people from rural areas to urban areas. You have more women in the workplace, so you have less time to prepare meals or to eat together. You have more availability of very cheap ultra-processed food. They're everywhere; so very easy access. There's definitely that transition towards that obesogenic environment. We're eating less of our traditional food. For example, rice and beans, which used to be a staple in Latin America and still is, but we're definitely eating less of it and that has been replaced with ultra-processed food and canned food and sugar-sweetened beverages. That has happened and it has happened at such a rapid pace that now South America is also one of the leading regions in the world in terms of regulation of junk food, because they are seeing the devastating effects of it. If you think of Mexico and Chile, they've done different initiatives in the past few years, regulating marketing of junk food for children and new regulations around front of package labeling. And just as a result as a response to COVID, there are some regions in Mexico, for example Ixtapa, they banned the sale of junk foods to minors, completely banned. So they have been taking very strong action.

LuAnn Heinen:

Is there any information yet on how that's playing out or any effect that that's having? How it's either changing sales? I know you'd probably see the impact on sales before you'd see the impact on weight.

Olivia Barata Cavalcanti:

Unfortunately, it is impossible to see a direct back from obesity, because obesity is a complex disease. So you would have to monitor different factors, but we have seen Mexico as a result, for example, tax on sugar-sweetened beverages and restriction on marketing, we have seen a decrease in caloric consumption. That is happening. It's just really hard then to make the causal association, because there are so many factors that go into obesity. This is just one of them.

LuAnn Heinen:

Let's stay on the theme of cultural differences and how that impacts efforts country by country to combat obesity. The role of stigma is super interesting too, because there are some countries where being too thin, looking emaciated, signals disease or lack of economic health. How does that affect obesity prevention?

Olivia Barata Cavalcanti:

Stigma has a complex relationship with obesity, because, in a way, stigma affects people that already have obesity, but also lead to increased consumption, for example, of junk food or a decrease in motivation to work out, it can obviously have an effect on mental health that then also can have an effect on obesity. Stigma is definitely something that we want to get rid of and unfortunately is present in different parts of society. We have stigma in health care. We have research on this showing that doctors tend to spend less time with patients with obesity and they tend to think that patients with obesity, because they lack discipline, they're not going to follow through medications, etc. We have that kind of stigma. We have stigma in the workplace with people with obesity being paid less. We have stigma in the media. It's something that we definitely need to tackle in the countries where we do have this problem. We also have other countries, for example even in the Caribbean and some parts of Latin America, some parts of Africa, where the larger body especially among women is accepted. We're not only talking about the size of the body here. We're also talking about how healthy the person is and you can be overweight and have a series of nutrition deficiencies. We don't want people to have that kind of stigma. We want people to be accepting of different kinds of bodies. We just want them to understand that obesity is not just about having a larger body, but it is about having a disease that then puts you at risk for diabetes, certain types of cancers, metabolic disorder, cardiovascular disease, etc. We just want to make sure that when we do talk about obesity stigma, we understand that it's something that doesn't necessarily cover all the countries in the world.

LuAnn Heinen:

That brings me to the double burden that we talk about in countries like India. Can you explain what's going on there?

Olivia Barata Cavalcanti:

We talk about double burden of malnutrition when you have the coexistence of undernutrition along with overweight and/or obesity. That can be at a population level. It can be at the household level. It can be at the individual level. Usually, it is more common among women. We have that in India. We have that in some Latin American countries. Honestly, I know at the individual level you have that in the United States. You have people that have energy over nutrition and iron deficiency, for example, that's a type of combination. That happens, especially in the population double burden of malnutrition, because that kind of food transition that I was talking about before where you go from being rural and maybe growing your own vegetables, you go into the city and buying prepared food, etc. That's happening at a faster and faster pace and is overlapping with the undernutrition problem that some countries still have. We're basically going through this food transition so fast that we can't basically get rid of one problem before we start having the second one. We have this very serious coexistence of problems.

LuAnn Heinen:

Well, what explains, going into maybe a little bit of a brighter spot, the relatively lower rates of obesity in the EU and then the UK, which is at the high end, are struggling maybe a bit more. We chatted before about where that could be headed, given the potential impact of Brexit.

Olivia Barata Cavalcanti:

I think there is a fundamental difference between the European Union and the U.S. in terms of food regulation and that's really a major difference. That starts at the very beginning with the approach to food regulation. In Europe there is very much a cautionary position. It's more of a better safe than sorry approach. Unless we can prove that a certain kind of food is not dangerous to humans, it's not going to be approved and be available for consumption. Whereas the U.S. operates under the innocent until proven guilty model, so it's available for human consumption until someone proves that that is actually harmful, then they pull it back. That means, for example, obviously there are much stricter rules around food in Europe. That can be from the use of antibiotics in livestock farming, in ammonia used in beef which is not allowed in the European Union and it is in the U.S., the amount, for example, high fructose corn syrup that you can find in some foods. What happens is that because most of our food is produced by the same multi-national companies, you have the same exact food, which can be the ketchup or a cereal, same exact foods from the same exact company, but it's produced with certain ingredients in Europe and with different ingredients in the U.S. In the U.S. it usually means more ingredients, cheap ingredients, more chemicals, and just more harmful. That's kind of a basic difference between the country and the region. One of the concerns of people here in the UK is that with Brexit, the UK might have some new trade deals with the U.S. which means that they could start importing that kind of food. I'm based in London, so if you read the headlines sometimes you hear, "oh my God, we're going to get chlorinated chicken now," which is something that is not allowed in the UK, but it is in the U.S. It is something of concern and it's something that the government here will need to carefully think about and possibly because the UK now has put together a strong strategy against the obesity, I hope they're going to think about this as well.

LuAnn Heinen:

It brings to mind the question of how much of this is about the quantity of food and how much is about the quality and the ingredients of the food that's contributing to obesity.

Olivia Barata Cavalcanti:

It's definitely a little bit of both, right? Because there is also a size problem in the U.S. that you don't have here where people are now used to larger portions. There have been studies, I think one of probably the most famous one is the *Bottomless Bowl of Soup*. This researcher put people around the table eating soup from a bowl, but they didn't know that basically below the table there was a little tube that was refilling the bowls of soup with more soup without them noticing. What happens is that if the food is there inside the bowl and it doesn't go away, we just keep eating. That's just the way we operate as humans. If you gave me a larger plate of food, I'm just going to eat more of it. We don't have that regulation that we used to have as babies.

LuAnn Heinen:

I'm familiar with Brian Wansink's research and it doesn't sound like physical activity is going to get us out of this.

Olivia Barata Cavalcanti:

No, unfortunately, not at all. Physical activity is very important and it's important for our overall health and our mental health, but unfortunately the impact the physical activity can have in weight loss is pretty small, maximum 30% of it can be attributed to physical activity. Again, we very much encourage people to be physically active, it's very important for your health, but it's not going to be the solution to obesity.

LuAnn Heinen:

One of the things I really liked on your website is the terrific graphic and explanation of the roots of obesity. In there it's biology, it's food, it's genetic risk, things like life events. Let's talk about some of those. We've talked about food and we touched on genetic risk when we talked about the Pacific Islanders, but can you elaborate on that?

Olivia Barata Cavalcanti:

This is a concept that we came up with last year for our 2020 World Obesity Day, is just for people to understand that the roots of obesity run deep. Obesity is a very visible disease, but there's so much that we don't see and those are the causes of it. Some of it, again, is our environment. We talked about the obesogenic environment that we live in. We have our genetic risk. We know that between 40% and 70% of our chance of having obesity is due to our genes. There have been hundreds of genes that have been identified that can contribute to the risk of obesity. There's two more that we don't know about and we keep studying those. Life events can have an impact on obesity, for example if you have illnesses and you have medications that impact weight gain. For example, if the mother has obesity during pregnancy, the baby has a higher chance of having obesity himself. Different things can affect the disease of mental health. It's not only that people with obesity tend to have maybe depression or other mental health problems, but some mental health disorders have been associated with decreased sleep or excessive sleep or increased appetite and medications again. Psychotic medications and anti-depressants can be associated with weight gain as well. Lack of sleep can disrupt hormones and increase cortisol, which is our stress hormone. There's so many things that can affect our weight.

LuAnn Heinen:

When you talk about life events, another one is trauma, especially childhood trauma or forms of abuse.

Olivia Barata Cavalcanti:

Absolutely. If you look at people with obesity, you're going to see a good portion of them had a trauma. If you look at people that had trauma, you're going to see an increased risk of obesity. There is an association there. Unfortunately, I think there has been a lack of research on this association, but it's definitely there.

LuAnn Heinen:

There's been a lot of trauma during COVID. It's reminded me how the UN has warned that obesity is a global pandemic in its own right, but that during COVID, we're all gaining more weight. Those of us who are stuck at home, we're struggling with our weight and we know it increases the stress that the fact that people with obesity are more than twice as likely to be hospitalized with COVID, more likely to need intensive care and so on. What does this mean for your work?

Olivia Barata Cavalcanti:

It's interesting. When this all started, because we work with many physicians, we do training in our committees, and I remember at the very beginning thinking, oh, we're not going to be able to work, we're going to be basically be out of work and the opposite actually happened. It's interesting in a way and I'm sorry that it took a global pandemic as serious as this to put obesity on the map. I feel that a lot of governments are starting to wake up to the urgency of obesity. When you're treating noncommunicable diseases like obesity or diabetes, or any other noncommunicable diseases, it's very hard to understand and to keep that sense of urgency, because those are long-term diseases. You see the effects throughout the years, sometimes decades, and you lose that. Governments run on election cycles, it's a different kind of timeline. I feel that COVID has really bridged that gap between the urgency and the short-term emergency of infectious disease and the long-term timeline of noninfectious diseases. I think many governments, not only the UK, but I was giving the example of Mexico and France was one of the first that also listed people with obesity among vulnerable population, they're starting to understand that if we don't treat our population and if we don't treat obesity, we're going to keep seeing those effects. They're just going to come out one way or the other. I think from a country and government perspective, there has been, if you wish that kind of positive side effect. On the

personal level has been really hard. It's been hard for people already living with obesity, because first of all, they are isolated, so they have no social support. They haven't been able to maintain their checkups with their doctors. We know that all bariatric surgery stopped for a long period of time and still you cannot have access to bariatric surgery in some countries right now. They are scared because they're looking at the statistics. They know that they have an increased risk of complications. It's been hard for them and it's been hard for all of us because we can't exercise, we have a very serious impact on our mental health, definitely an impact on our sleep, stress levels. Most of us tend to buy food that have a longer shelf life, so we don't have to keep going out and buying again. We have to look at the facts. At the national level, we have seen one effect and maybe, hopefully, it could be positive. On the individual level, it's been really hard for people without obesity and for people with obesity.

LuAnn Heinen:

It's rough. Can I just say that we're getting tired of cooking? You just want to buy something ready to eat?

Olivia Barata Cavalcanti:

Some people, yes. Personally, cooking has been my coping mechanism through the pandemic.

LuAnn Heinen:

That's wonderful. You said COVID is creating more urgency for governments. What can governments, and I also want to get to companies, be doing? We know that there are some policies being put in place, not just in the EU, but elsewhere. What do you see as promising and what recommendations would you have?

Olivia Barata Cavalcanti:

First of all, recognize obesity as a disease, because if we don't recognize it and we don't monitor, we don't track progress, and we don't take action. So first of all, we need to recognize it. Governments need to provide affordable access to obesity treatment and definitely regulate ultra-processed food, their marketing, really protect their citizens and invest in cities that are designed to promote healthier lifestyles. One specific action that is in the plan, the new obesity strategy that was just developed by the UK government which hasn't been implemented yet, but is a total digital marketing ban on junk food. Because we also need to keep up with the times, right? There's no point of having, for example, a TV marketing ban now. Most young people are online. We need to tackle all the places where especially young people can see those advertisements. Governments have definitely many ways in which they can help and they can protect their citizens.

For companies, I really believe that companies have an opportunity now to do in the obesity space what many companies had done in the past against tobacco use, and maybe, hopefully become examples that then even governments can emulate. They can take voluntary action and initiatives, which are really necessary. Obesity being such a complex disease really needs that multi-stakeholder approach and considering how much of our time we spend at work, may that be at home working or in the office, I feel that employers really have a great opportunity to help. That comes through ensuring that all employees have access to health care. They have access to mental health services, because we know that mental health is really associated with obesity. They can raise awareness on the issue and that helps ensure that we have less stigma and people understand that. Stigma discrimination really comes from not knowing and ignorance around the problem. Raising awareness and understanding around obesity is really important. For when we do go back to the offices, it's really important to have healthier workspace, you might have sending desks, you might have collaborative zones where people can kind of go from one place to another to work together. If you can offer snacks, minimally processed snacks. If you have a cafeteria in your company, try to not have at all ultra-processed foods, try to provide water and really help employees kind of manage stress. I think those are the most important things. As the World Obesity Federation, we really look forward to collaborate with employers and help in any way that we can and we really hope to start with World Obesity Day and raising some awareness around the issue.

LuAnn Heinen:

That's fantastic. We know companies are thinking a lot about return to work and supporting both the home and the workplace environment with respect to physical activity, stress ergonomics, a lot of the things that you talked about. It's a major focus of discussion along with ventilation and safety measures. Given kind of the magnitude of the global problem that you all have taken on at the World Obesity Federation, what does success look like?

Olivia Barata Cavalcanti:

Well, people recognize that obesity is both a risk factor and a disease, and that information and that education can lead to change in policies and in attitudes. Doctors are trained in obesity. Most medical schools don't have an education at all around obesity. That's a really important step that would mean success to us. Governments are actively taking action to protect their citizens and to provide them with a healthier environment and access to healthier food and better health care.

LuAnn Heinen:

The work that you're doing training health professionals is hugely significant and really promising as far as making an impact on our future. Taking on the problem with children, that's something that we can, I think, really universally unite around. Have you seen any promising practices when it comes to child obesity?

Olivia Barata Cavalcanti:

Usually childhood obesity is something that is a little easier for governments to get behind, because whereas among adults we have this unfortunately misleading idea that obesity is the product of individual responsibility, it is a little harder to make that argument around children. Childhood obesity is usually a little easier also to get funding for and to get commitment. We do see some examples, there was one in Leeds, there is one in Amsterdam, and in the U.S., you see at local levels, and usually what works is having multi-stakeholders. You engage the family, you engage the school, you engage the local shops, you engage for example the local department of health or clinics. Working together usually you can see some results. The important thing also to think about here is that besides from the proportion of the percentage of children that have just a genetic risk, a high genetic risk for obesity, usually the childhood moment of life is the only phase where we can actually prevent obesity. Once you're adults and you have obesity, you can treat, you can manage, but you can't really do any prevention. In children, you still can. It's really important to invest in that moment of life. So far we have seen some local initiatives, but we haven't seen a country that was able to reverse childhood obesity rates yet. And that's concerning.

LuAnn Heinen:

It's so concerning. When you think of the human costs and the economic costs. A \$2 trillion impact worldwide, I think what the World Health Organization estimated.

Olivia Barata Cavalcanti:

You have medical costs and you also have indirect costs. You have productivity costs. It is a very expensive disease also because it's a disease and a risk factor. It also leads to diabetes and cardiovascular disease and certain types of cancers. It really is something so urgent that governments need to take action now.

LuAnn Heinen:

Thank you so much, Olivia, for this wonderful conversation. I'd like our audience to know that Business Group on Health has just released *The Global Landscape for Overweight and Obesity: A Guide for Employers*, that's available to members on our website, <https://www.businessgrouphealth.org/>.

Olivia Barata Cavalcanti:

Thank you so much for having me here.

LuAnn Heinen:

I've been speaking with Dr. Olivia Barata Cavalcanti of the World Obesity Federation about her organization's work to promote understanding of obesity as a disease, address child obesity, reduce weight stigma, and train health professionals globally to treat obesity. World Obesity Day is March 4th. Its goal is to increase awareness, encourage advocacy, improve policies, and share experiences. Check out their website, <https://www.worldobesityday.org/>.

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I'm LuAnn Heinen and this is Business Group on Health podcast, conversations with experts on the most important health and well-being issues facing employers.