Dennis Barbour (00:00:03):

Good afternoon and welcome to the partnership symposium in young male's body image and eating disorders. I'm Dennis Barbara, the partnerships presidents. Thanks for joining us in our symposium. One of eight, we are sponsoring over the course of five months. We're honored to have a panel of nationally recognized experts in young male's body image and eating disorders. Join us today after their presentations and discussions, they will take questions to the audience. So if you have any questions, make sure to send them along in the questions function by way of background, a word about the partnership and why we exist. The partnership is consortium of over 20 national organizations that have a stake in young male health and wellbeing. As our mission states we work with and on behalf of adolescent young adult males, to optimize their health and ensure that they thrive. We are the only, we are the only national organization who sole focuses on the health and wellbeing of these young males, otherwise known as gen Z.

Dennis Barbour (00:00:55):

Those between the ages of 10 and 25, young males as age are largely left out of our healthcare system. By age 13, 80% of males and females both stop, stop seeing pediatrician, females, largely transition to gynecologic care males. However, do not largely transition to a source of ongoing care. We exist to help fill that gap through awareness of this problem, and by providing the means to address it. Our 2022 symposia is designed to raise awareness and to guide parents and other caregivers on how they can address the health needs of young males. Before I introduce our guests, I'd like to reiterate that we'll be taking questions for our panel throughout the session. You'll also receive a survey immediately after the session, we urge you to fill out the survey to help inform how we can better design future symposia. Again, thanks for joining us today.

Dennis Barbour (00:01:46):

We're pleased to have the following presenters today. Dr. Robert Olivardia is a clinical psychologist clinical associate associate at McLean hospital and lecture in the department of psychiatry at Harvard medical school. He maintains a private psychotherapy practice in Lexington, Massachusetts, where he specializes in the treatment of eating disorders and body image issues and boys and men, his research and clinical focus clinical focus spans over 30 years. Dr. Jason Nagata is a pediatrician and researcher specializing in adolescent medicine at the university of California, San Francisco. He researches body image and eating disorders and teens and edited the book, eating disorders and boys and men. He has published over 200, (Cough) excuse me, 200 articles in academic journals. And his research has been featured in the New York times, the guardian and NBC news, Dr. Tiffany Brown is an assistant professor in the department of psychological sciences at Auburn university, licensed clinical psychologist and the deco director of the Auburn eating disorders clinic.

Dennis Barbour (00:02:53):

She directs the, uh, appearance concerns, eating prevention and treatment lab, where her research focuses on interventions to promote body acceptance and decrease eating disorder risk and understated understood studied populations, including young men in LGBTQ individuals. Dr. Emilio Compte is a researcher at the eating behavior research center and director of the master's program in eating disorders at the university of dud, Adolfo Ibáñez, Chile. His research interests are related to eating disorders among men and sexual and gender minorities under the implementation of psychological evidence based treatments in Latin America. Finally, Dr. Jason lavender is an associate professor in the department of medicine at the univer, the uniform services university of the health

sciences and deputy research director of the military cardio cardio cardio cardiovascular outcomes research program with medic foundation. He is an expert in eating disorder, symptoms and body image concerns in boys and men, and his research has a particular focus on non-traditional symptoms. Thank you all for being here, Dr. Olivardia, and I'll turn the program over to you.

Roberto Olivardia (00:04:05):

Great. Thank you, Dennis. And for, uh, the partnership for male youth, to recognize this as the important topic that all of us on the panel, uh, know it to be, I'm going to share my screens and I am going to give just a general overview, uh, before, uh, turning it over to my esteem panel members to get, um, into more detail and issues of assessment and prevention treatment. So I wanna just start off by telling you my story of this, um, for those who are young watching this, um, this is an answering machine <laugh> back in the day, about 30 years ago, I was a college student doing a senior honors thesis on eating disorders in men. And I had proposed to my thesis committee that I wanted to put ads in various college newspapers. I'm from Massachusetts. We have a lot of colleges, um, to seek men who had eating disorders to speak with me and to gather as much data as we can, because the research was very limited at that time.

Roberto Olivardia (00:05:11):

Uh, there were actually no community samples of looking at men with eating disorders. A lot of the research at that time were men who were hospitalized, who had sought treatment. My thesis committee were very supportive, but they said, well, you know, you might want to plan B just in case you don't have enough men responding, uh, because it may not be that common. Well, I remember the day that I had come home from class of the day that the ads went out to all of these various colleges and my answering machine tape was full of messages. And they were messages of men who were relieved that somebody was looking at this, who were very emotional in the answering machine messages that they left, uh, saying that they had never disclosed to anyone that they had an eating disorder and that they were glad that somebody was researching this.

Roberto Olivardia (00:05:58):

I did not need a plan B. And that was really the beginning of recognizing this population of individuals who really were missed, um, diagnostically and treatment wise. When we talk about eating disorders and we'll get into more detail as the panel goes on, but briefly there are various eating disorders, anorexia nervosa, which includes basically, um, a major caloric restriction. Often people, uh, referred to as self starvation individuals who are, uh, very underweight, uh, Dr. Nagata will be talking about medical complications that happen, uh, with anorexia as well as other eating disorders, binge eating disorder, which is characterized by eating a very large amount of food in a relatively short period of time. Often, very quickly to the point of being uncomfortably full, um, bulimia nervosa, which includes episodes of binge eating behavior, coupled with compensating behavior, either in the form of, uh, purging laxative, use diuretics, uh, excessive exercise or fasting orthorexia, which is not a clinical diagnostic, uh, DSM disorder, which refers to though individuals who almost obsessively are looking to eat purely or, uh, very clean.

Roberto Olivardia (00:07:21):

It may not have anything to do with their body image per se. Uh, but they tend to be almost very obsessive compulsive about their health. Um, and then there's a category in the diagnostic and statistical manual for mental disorders or DSM, which is called RFID or avoidant and restricted food

intake disorder for individuals that may not meet the criteria precisely for anorexia bulimia, binge eating disorder, but never there nevertheless have, uh, very, um, sort of dysregulated eating, uh, behavior that could affect their health, um, and their weight regulation. And then we have a whole host of what's called subclinical eating disorders, which are, um, maybe again, don't meet the criteria precisely, but in no way, does that mean that it is not, um, impacting somebody or could be harmful the word subclinical? It's also a bit of a misnomer. It doesn't mean that it's less dangerous.

Roberto Olivardia (00:08:19):

I've work with many boys and men who don't fit the, uh, classic criteria for anorexia bulimia, binge eating disorder, and are engaging in a lot of disordered eating that, uh, is very impairing to their health. Now, with men, we're talking about a topic that really is fairly new in the sort of history of psychiatric literature. Um, even when I started doing this work 30 years ago, they were the prevalence data was kind of all over the place because frankly, you didn't have a lot of people researching it. You didn't have a lot of men who had eating disorders who were disclosing it, but now we have better data. And studies now show that one in four individuals who have an eating disorder are male. Now, interestingly, there just, there's a disparity of the men who have eating disorders and men who seek treatment or access treatment that studies show that one in 20 eating disorder, patients are male.

Roberto Olivardia (00:09:16):

So there are a lot of boys and men who aren't getting the help that they need, at least 10 to 15 million males are affected by eating disorders in this country alone. And when studies look at those subclinical eating disorder behaviors that can find that they could be nearly as common in men as they are in, in females. Now we're also going to be touching upon body image and body image disorders as well. One of which is body dysmorphic disorder that might be mentioned, and this is not an eating disorder per se, but a preoccupation with a part of the body or appearance could be obsession around the nose or the skin or the hair penis. Um, I'll be talking in a minute about body build. It affects about one to 2% of the general population and actually has about a 50, 50 gender distribution. So contrary to popular belief that BDD affects just as many males as it does females.

Roberto Olivardia (00:10:14):

It's still a psychiatric disorder that often goes unrecognized. Uh, many people with B D D uh, get misdiagnose, as just having depression, although a number of them also have depression, um, or social anxiety. Um, there's a lot of shame in people who have B D D. They can often be quite isolated or housebound and often feel very alone and stigmatized. Now, one, a subtype of body dysmorphic disorder is a clinical diagnosis that I, myself and my colleagues coined in the mid nineties, when I, when we were researching men with eating disorders and I would come across a lot of men who would disclose to me that when they were younger, they had anorexia, but they realized they didn't want to be skinny. They just wanted to be lean. And so, but they didn't like being thin. They wanted leanness, but they wanted muscle as well. And in a sense that the pendulum sort of swung in this other direction where they became just as obsessed with calories, but also with gaining muscle.

Roberto Olivardia (00:11:17):

And so at first it was referred to as reverse anorexia, um, in popular culture, you might hear as bigorexia, but we had coined the phrase muscle dysmorphia because it really fits in that category of body dysmorphic disorder. And these are typically males. Although females can also have muscle dysmorphia, but the majority of patients that I've treated are male who have a preoccupation that they're not big

enough or muscular enough. And so they get very obsessed, um, with working out with their diet, but not with necessarily losing weight, they just want to lose fat, but they want to, to gain muscle weight. It can very much impair their social and occupational functioning be associated with a lot of avoidance and compulsive behaviors. It's often associated with anabolic steroid use a number of male patients that I've worked with with muscle dysmorphia, also abuse steroids, and also associated with other clinical disorders like depression, anxiety, um, eating disorders.

Roberto Olivardia (00:12:16):

And just to note that this does not mean all weightlifters or bodybuilders have muscle dysmorphia, um, men with muscle dysmorphia do and studies that I've done significantly differ from comparison weightlifters. However, they could be seen as very similar to men with anorexia or nervosa. It's almost that it's just manifesting in a different way. When we talk about body image, body image is a complex sort of, uh, thing in a sense it's more than just how we see ourselves. It's also how we feel about our bodies and what we see, the, the thoughts, the attitudes we have about the way we look and how our body works and operates. And of course, the behaviors that we enact to and with our bodies, um, it's not only something that plays a role in eating disorders. Lots of people can have eating disorders who do not have body image problems.

Roberto Olivardia (00:13:09):

And there are certainly lots of people with negative body image that may not develop eating disorders and body image is different than physical appearance. Our physical appearance is more those objective pieces of data. I have brown hair, our body image could be how we feel and think about that brown hair, for example. And sometimes as we know with eating disorders, there could be real distortions of what people see body image can also reflect a deeper sense of how one sees themselves and their identity. And a lot of times in treatment with patients, that's what we're really looking at is what does one hope to gain by having an, a perfect body or an ideal body. And if you want to sort of even tap into how you think about your body image, it's just assessing what is your self talk around your body? And where we start to see problems is when there are distortions and appearance, a lot of negative self talk where people, a lot of their self-esteem will start to rest, um, primarily on their appearance and the way they look, um, is not a good sign, certainly when it starts to interfere with their functioning and any engagement and unhealthy behaviors, which we'll be talking about today.

Roberto Olivardia (00:14:24):

A study that I had done in 2000 actually looked at body image in males because a lot of studies that had been done had said, well, some men want to gain weight, some want to lose weight, but the role that muscle plays was not really, uh, sort of seen in a lot of research. And so in this study where I had been, who had, um, basically picked what they see as an ideal body, uh, what they think this is a, a sample of heterosexual men, what they thought women preferred in a male body and how they saw themselves. And we actually measured their height, weight, and body fat. And we found that men do have these Body even, and this was a sample of men that I should say, did not have eating disorders or body image concerns. We had screened those out. These are general college population, and many of the men perceive themselves to be fatter, have more body fat than they actually did.

Roberto Olivardia (00:15:18):

But what was significant was their ideal body was eight pounds, less body fat, which wasn't particularly significant. But what was, was that they idealized a body with 25 pounds more muscle, which is a lot of

muscle mass. And they thought women wanted them to be more muscular and less fat than women wanted them to be. And what we found is we sort of used this phrase of muscle. Belittlement the men who perceived themselves to be less muscular than they truly were, were highly correlated with scores on depression, drive for thinness feelings of ineffectiveness, body dissatisfaction and negative self-esteem. And all of those things are things that are placed people at risk for eating disorders. Now, we certainly know historically that women and girls have been placed under extraordinary pressure to look a certain way through media imagery. And what we're going to be talking about today is drawing attention to what boys are subjected to.

Roberto Olivardia (00:16:17):

Now, this is an ad from 1972 Charles Atlas, who you start started to see, even in the seventies, this attention to the body, you may not be able to read the panels, but basically has this thin guy with the girl he's has sand kicked in his face by this real muscular guy. He can't stand up to him because he just doesn't have the right body. And he says that big bully. And then the woman says, oh, don't let it bother you. Little boy, which is obviously bit emasculating. The boy goes home. He orders Charles, Atlas's build your body book. And at the end, he punches that guy in the face. And the last panel from the woman says, oh, M you are a real man after all. So now we started to get these imagery of like building your body and having a certain kind of body makes you more of a man.

Roberto Olivardia (00:17:06):

And this is a theme that will be talking about in the panel of its tied to masculinity. I co-authored a study in the late nineties, which looked at male action figures that are targeted to boys because basically inspired by the Barbie doll study, which found that if the Barbie doll were a real life, human female, her dimensions would be completely unrealistic. Well, it turns out for boys. That's true as well. This is GI Joe, um, that some of the GI Joe action figures that I would play with as a kid, um, the one on the left is from the late seventies, then the middle mid eighties, and the one on the right and the late to mid nineties, mid to late nineties. So as you can see, GI Joe has spent a lot of time at the gym, um, during those decades. But this is what young boys are being subjected to.

Roberto Olivardia (00:17:54):

Now, this is Luke Skywalker from the star wars movies and Luke Skywalker action figure from the seventies when star wars came out. But when it was re-released in theaters in the mid nineties, it seems that the character, Luke Skywalker spent a lot of time at the gym because it was a conscious effort to make it more muscular, even actor, mark Hamel, who plays Luke Skywalker said, oh my gosh, they put me on steroids. I grew up in the ni in the eighties. And of course the big movie stars were stars where their body was, their commodity was their currency, Sylvester Stallone, Arnold S Schwartzenegger. And that's continued today where a lot of male action stars, their body is basically what can draw in, um, the box office box, uh, MTV certainly made music a more visual, medium, and girls and women who are in the music industry again, um, have always been subjected to looking a certain way.

Roberto Olivardia (00:18:49):

And we started to see that happening more and more with male artists, um, athletes and entertainment athletes, like in the WWE world, wrestling entertainment, big bodies. Um, this is duke Newcomb, which is a video game, which their highest demographic, our males between the ages of 15 to 24 and duke Newcomb is a very militaristic masculine misogynistic character. But in this video game, if duke Nukum is losing power, all he needs to do is click on the hidden bottle, that hidden bottle of anabolic steroids.

And he gets maximized and gains a lot of power, which to anyone out there should be very disturbing. Certainly the proliferation of men's fitness magazines from the late eighties into the nineties, started to show a lot of attention of not only the body, but again, its connection to masculinity to being seen as sort of more manly, uh, mark Walberg who at that time was under the persona of Marky mark, the funky bunch.

Roberto Olivardia (00:19:50):

Um, I, I would say it's fun to probably YouTube him to see what his career as a rapper was like, but Calvin Klein was brilliant that they featured him and times square because before that time, uh, your average man was not going to spend six or $7 on a pair of underwear. It was basically Hayes or fruit of the loom and picking mark Walberg, who was a heterosexual at that time, slightly homophobic young man with this very fit body literally changed the whole industry in terms of, uh, men buying underwear, that it was, it draw drew in a lot of big bucks. And this is Abercrombie and Fitch who continued, um, cuz you know, everyone strips down in the middle of a football field, but not only for underwear, but we started to see advertising and the male body being used for everything from salad dressing to air fresheners and to even pocket Scrabble.

Roberto Olivardia (00:20:48):

So the male body in social media has been a whole other thing with celebrities posing with themselves, holding their genitals, being half dressed, other social media apps that young people are subjected to not only for young girls to highlight their Fe facial features take the yellow off their teeth, but market it also to boys to look a certain way to get rid of their acne when they're taking a picture to whiten their teeth, um, to in increase their height and social media studies have shown that it not only affects young girls and their body image, but boys and young men as well. And just a quick note before I turn it over to our next presenter that, um, although the majority of boys and men I've treated, um, are not athletes, I have treated many athletes and that's um, one of the high risk groups we always wanna be aware of and all different kinds of sports, um, dancers, football players, as pictures, Joey Julius, who played for Penn state, who courageously shared his story about struggling with binge eating disorder, um, that tho these groups can be particularly at high risk due to a lot of attention on making weight, losing weight exercising, um, and individuals who can really in the process do a lot of damage, uh, to their bodies in the service of playing a sport.

Roberto Olivardia (00:22:16):

So I am going to turn it over to my next speaker, uh, Dr. Jason Lavender. Who's going to be talking about assessment.

Jason Lavender (00:22:49):

All right. Apologies for the delay there having to order sharing my screen here and here we go. Okay. All right. Okay. So apologies for that. Um, so I'm gonna be talking about, um, assessment and actually I'm really excited. Um, a lot of what I will be talking about sort of builds on what Dr. Olivardia shared, um, and sort of follows a similar, uh, timeline in terms of thinking about, um, sort of where are the origins of assessments for eating disorders and body image. Um, and how does that influence, um, the things that we're using to assess these constructs today? So one of the questions that I want to, uh, share to the group first, um, is to think about for whom many of our most widely used measures were originally developed. Um, and what are the implications for assessing males today? So, um, I'm gonna start off with a very, very brief, I promise primer on measure development.

Jason Lavender (00:23:49):

Um, and, um, to do this, I wanna ask people to sort of in their minds to go back in time and think about if you were in the 1970s or eighties, and you wanted to develop a measure to assess eating disorder symptoms. Um, and you wanted to assess the kinds of symptoms and experiences that were being experienced by the patients that you're seeing. Um, and likely the patients that you're seeing are going to fit within a particular demographic. Um, and that demographic is likely going to be a young, white, um, fairly socioeconomically advantaged female, um, and that likely is gonna have an influence on what you're viewing the symptoms that you want to assess to be. Um, and that is sort of a framework for where we'll go from here. So your first step in developing a measure is to define and elaborate the construct.

Jason Lavender (00:24:43):

And that means decide what it is that you want to assess. So I'm gonna use the example, um, some of you will be familiar of sort of C B T, and the E D E Q. Um, but let's say you've got based on your observations of the patients that you're seeing this idea that extreme concerns about weight and shape are really important, that that leads to strict dieting, which in turn can lead to behaviors like binge eating and self-induced vomiting. So you've identified those as sort of a core variables and symptoms that you really want to assess. So your next step is gonna be to come up with some items to specific items that are going to assess things like that. And you're likely gonna base the items on your clinical experience and based on the things that you've heard from the patients that you've been seeing.

Jason Lavender (00:25:28):

So maybe your patients have talked about their fear of gaining weight and how strong that fear is or talking about their desire, that they really just wanna have a completely flat stomach, or that sometimes they go, you know, eight hours a day or more without eating to try to lose weight, um, or that they have this really, um, strong fear of losing control over their eating that they're constantly struggling with. So you develop these items that are assessing these variables, um, that you think are important for your construct, and that seem to be important for your patients. And then you're gonna take those items and you're going to give them to groups of people. Um, you're gonna test those items out. You're going to, uh, probably iteratively, change them a little bit and adjust them. Um, and then hopefully in the ideal world, you're gonna do some psychometric testing. Um, what that means is you're gonna look at things like reliability or the consistency of the measure, um, and validity, you're gonna look at how accurate, um, is that measure actually, um, assessing what you're hoping it assessed. Um, ideally this is gonna be done in a lot of different samples. Um, and even more ideally, hopefully it'll be tested within the type of sample or a sample that reflects the population that you're hoping to use that measure in.

Jason Lavender (00:26:46):

So again, in an ideal world after all of that, um, you've gone through this, this process of, um, conceptualizing the measure, developing it, testing it. Um, and then you have a final measure like the eating disorder examination questionnaire as, as one example. So let's return to that question for whom were our measures really, um, originally developed, um, and most of our traditional eating disorder measures and many of the traditional body image measures as well, um, were developed within a relatively heterogeneous group or with a relatively heterogeneous group in mind. Um, and as I mentioned early on, that is predominantly a young white and socioeconomically advantaged, uh, group of, of women, often young women, especially from westernized countries. Um, the implications of that are really that sort of the pursuit of the thin ideal or weight loss or avoidance of weight gain, which for

many eating disorders and, um, for sort of the, what we consider the prototypical or traditional ideal body for women, um, those types of motivations concerns and attitudes are really the underlying aspect, um, that leads to other behaviors, cognitions and symptoms that we see in eating disorders.

Jason Lavender (00:28:09):

What that also means is that in with respect to, uh, boys and men, that certain content, um, in measures that were developed from that sort of basis, um, being focused on young women, certain content may be overlooked within the measures. And there may be content within those measures that may have less applicability or potentially no applicability to men. Um, and a few points to note is that, um, in terms of boys and girls or men versus women, um, there are physiological differences that may impact, um, assessment, um, particularly with regard to, um, considering things like caloric needs. Um, and when considering what may be an objective binge or not, I'll speak more about that later. Um, we know that overall, although there's a lot of, even within gender, uh, differences in body ideals overall, the male body ideal does differ pretty significantly from the female body ideal.

Jason Lavender (00:29:10):

Um, and there may be unique risk factors or motivations, um, between men and women. Um, one of those being gender norms, uh, like, uh, Dr. Olivardia mentioned particularly the idea of, of being sort of conforming to masculine norms and the impact that might have not only on actual experiences, but responses to assessments. So just a few examples of some items from sort of traditional eating disorder measures. And when I say traditional, that doesn't mean that those eating disorder measures are not still very widely used. Um, and that's important, uh, to think about particularly within clinical contexts, but also research contexts. So items like have regular menstrual periods. I think my hips are too big. I thought my butt was too big. I think my chest is too small, um, when applying to, uh, female body image or, um, the body image of those who identify as women, um, these items may have more applicability, but their meaning may have different applicability in men or no applicability, um, depending on, um, the nature of the individual that's being assessed.

Jason Lavender (00:30:17):

So it's important to keep in mind that not only does having items of this kind, um, lead to potential issues with what the scores mean and how individuals respond to measures. Um, but it can have the unintended effect of having individuals who are responding to these measures feel as if they do not apply to them. Um, and a concern that I'll note later is the idea that eating disorders, um, are still quite stigmatized, um, in general, and especially for men in part due to the, sort of the general conception that eating disorders are more of a feminine problem. So these items can have sort of a negative effect and unintentionally promote additional stigma, um, when males or men, especially if they're buying into those masculine norms, more strongly are finding that they're having to respond to these questions. Um, another example are silhouette scales, which, um, were used, uh, probably more in the past a little bit less now, but I did just wanna point out, um, an example and sort of the idea that the original silhouette scale looked a lot like this, where there was really a focus just on overall body size, um, likely with a little bit more focus on body fat.

Jason Lavender (00:31:30):

And the idea is that it, most individuals, particularly women would, um, identify if they had a body dissatisfaction would identify their current body as looking a certain way, usually a higher number on the scale, and then would identify what their ideal or desired body would, would be, which would be

lower on the scale. And the difference between those two would indicate the degree of body dissatisfaction, um, when these scales were used with men and Dr. Olivardia mentioned this, um, when it was translated and initially focused just on body size or body fat, um, one of the issues was that there were men certainly, um, similar to, uh, most women identifying their current body size as being larger than, than they wanted and desiring a smaller body size. But there were also men who would identify their current body size as smaller and desiring a larger body size, but what this type of course, assessment that's just focused on body fat was missing was the, the dimension of muscularity, um, that we now know is especially important for men also increasingly important for women, but that's for, for another talk.

Jason Lavender (00:32:40):

Um, but, um, so now we know that especially in men, but in general as well, um, we really need to consider body image from a multi-dimensional perspective, um, and at, at a minimum considering sort of both a body fat body weight dimension, and then also a muscularity dimension. So that was sort of my background. Now I wanna turn to thinking about, um, if you are looking to use an assessment, um, with, uh, a young male or a man, um, what are some things to consider? And this is more of a, sort of a overview. I'm not gonna go into specific measures, um, unless I have time, but, um, my email was in this talk, feel free to reach out to me, um, at any time if people have questions, um, in the future about specific measures. Um, but the first question to ask really when selecting a measure for any purpose is what is that purpose?

Jason Lavender (00:33:33):

What are you looking, um, to administer the measure for? Um, are you looking to administer this measure for clinical purposes or in a research study? Um, many of the, the specific questions you've asked for clinical or research use would be similar, but there may be some differences. For example, are you looking to, uh, diagnose an individual with an eating disorder, the types of measures that you would use, um, to actually do a diagnostic, uh, type of assessment may be different from those measures that you're using, if you're just looking for sort of the severity of particular types of symptoms, um, are you using this for purposes within a clinical context of treatment planning, for example, um, that may necessitate using a measure that assesses certain specific types of eating disorder symptoms or related constructs, um, that are especially relevant to the type of treatment that you're thinking of administering, um, are you looking at at progress or outcomes over time, either naturalistically in a research study or, uh, potentially in the context of treatment, um, again, that may necessitate the selection of different types of measures that, um, are specifically assessing what's important, given the context that you're using it in.

Jason Lavender (00:34:49):

Um, and then more broadly, um, are you gonna use an interviewer, a questionnaire? It's always a, a question. Um, we face that both in clinical and research context, obviously interviews, uh, usually involve more burden both on the, uh, administrator side and on the participant or patient side, um, and there's pros and cons to both. So it's always a consideration. Um, it may be a particularly a consideration for younger populations or younger boys. Um, when there are concepts that may be a little bit more difficult to capture or understand using questionnaire. So always a, a, a consideration to ask and to think about when selecting a measure, um, and related to that. So what is the appropriateness of a given measure for the individual or group that you want to assess? So today we're talking about young males, um, so was the eating disorder or body image measure, um, that you're interested in, um, developed with males, were males included in the original sample that tested the measure or in the, um, if not in

the sample, at least in the conceptualization of the measure where males considered, um, or was it more of a focus on females and, and sort of more traditional what we might consider, um, feminine, um, concerns regarding traditional, uh, pursuit of thinness, um, and things of that nature, um, E even if it wasn't developed, um, has it at least been evaluated or tested in males?

Jason Lavender (00:36:17):

Um, since that time, um, the development obviously influences the content of the measure, but sometimes the content of the measure may still have relevance for males, even if it's not fully capturing everything that you want to. So, as long as it's been tested and evaluated in males, then you can have a little bit more confidence, um, of using it with, with a male or a group of males, um, is the language appropriate. And in this case, I'm talking more about sort of language, comprehension and understandability, depending on the age of the individual. So if you're talking about a younger adolescent or even, um, a boy that's younger than that, um, it's important to consider what the language of the measure is, and if it's really comprehensible given the individual just age or the, the group's age. And then, um, obviously this is a very important topic that could be an entire lecture, but I did just want to note it briefly, um, about not just focusing on the, the sex or gender of the individual, but really considering, um, intersectionality, um, and considering of within the sample or the individual that you're assessing, um, what other identities, um, the, that individual has, um, and what potential influences those identities might have in terms of the reliability, validity, and applicability of an assessment.

Jason Lavender (00:37:34):

Um, and so just a few examples of other things to consider our race, ethnicity, gender identity, sexual orientation, things of those, um, natures, um, that all may have impacts on how an individual responds to, um, any given assessment.

Jason Lavender (00:37:52):

Um, so obviously, um, the next step or the next question really is to consider what do you actually want to assess? So eating disorders and body image can include a lot of different things. Um, so for standard eating disorder symptoms, you have things like binge eating and purging restraint shape, and weight concerns typically focused on thinness or fear of weight gain. These are the type of symptoms that we see in most of our traditional widely used measures, things like the eating disorder, examination questionnaire, um, the eating disorder inventory, the various versions, um, the eat, um, and that does not mean that those measures cannot have applicability in mails. And there are a number of studies showing that, um, there, when used in certain ways, there is evidence of, of reliability and validity. Um, but that may not capture the full, um, scope of symptoms that are relevant, uh, to a given individual or group.

Jason Lavender (00:38:47):

Um, what's not captured in those traditional measures are things like the muscularity oriented, disordered eating symptoms. And those can be things like extreme focus on access to specific foods, eating for weight, gain protein, over consumption, bulking and cutting cycles. This really fits with some of the symptomatology that you heard, um, from Dr. Olivardia. Um, and then certainly body image. Um, again, as Dr Olivardia shared body image is a complex multi-dimensional variable, that's attitudinal, cognitive, behavioral affective, et cetera. Um, with regard to thinking about it more from a standard, um, eating disorder, uh, perspective, or, um, just a body focused perspective, some of the variables, um,

that may be important to con, uh, to assess are concerns about weight and shape. Um, and then particularly with males, when at all possible really evaluating specific attitudes, concerns, preoccupations, et cetera, both with mu muscularity, um, sort of the bulk and size as well as leanness or low body fat, which often comes in the form of, of desires for definition.

Jason Lavender (00:39:54):

Um, and then, um, also height may be an important variable to consider, um, and is, uh, present in certain measures of male body image, like the male body attitude scale, um, certainly muscular, uh, muscle dysmorphia symptoms, which Dr. Olivardia spoke about, um, can be important to assess as well. Things like drive for size, um, and muscularity preoccupations avoidance of appearance. Uh, and, um, impairment is a construct that often is missed and can be particularly important to assess with all of these different types of the symptoms. Um, and then the use of appearance and performance enhancing drugs, um, can be very important. I have this under muscle dysmorphia symptoms. It can occur independent of muscle dysmorphia, of course, um, but things like protein supplements, um, that should be creatine apologies there, uh, pre-workout fat burners, steroids, et cetera. And importantly, it's, it's useful to look at both IIT and illicit substances since there is some evidence that IIT use of substances, um, particularly at younger ages and adolescent may be predictive of using more serious, severe, and potentially illicit substances in the future, um, and then problematic exercise, um, and that can include both cardio, um, or aerobic exercises, but importantly, also muscle building exercises like working out, um, and aspects related to that like impairment of and persistence despite injury.

Jason Lavender (00:41:22):

Um, so just a few others. Um, and I added these quickly actually after Dr. Dr. Olivardia's to get at at some of the risk factors, um, would be sociocultural pressures in sources. Um, cuz we know that pressures can come not just from the media, which is a huge source, but also potentially from family and peers. Um, but relatedly also the internalization of those things. So the extent to which in a person is really internalizing, um, body ideals and or messages from various sociocultural sources. Um, and certainly social media use given the preponderance of evidence that it can have deleterious effects on, on eating behaviors and body image is an important variable to consider, um, finishing up. The one point that I wanted to, uh, make note of is, um, the potential for self-report biases and assessment, which is always present in any form of self-report, but with regard to assessing eating disorders and body image in males and especially young males, um, there can be, um, you know, a persistent misunderstanding that these, uh, concerns are, are feminine, which can lead to, uh, shame, um, and stigma for males, um, especially for those that buy into, uh, gender norms.

Jason Lavender (00:42:37):

Um, and this can result in denial minimization or just not recognizing or under, or sort of, um, identifying with the symptoms among males. Um, so the last two points were just that with regard to objective binge eating the differences in males and females, uh, eating habits, requirements, et cetera, um, can lead to some difficulties in identifying what that really looks like in males versus females. So it can require some particular attention in assessment, particularly among adolescents with higher nutritional needs. Um, and with regard to compensatory behaviors, we often see that shape and weight control. Um, behaviors may take the form more of exercise in the form of working out versus cardio or aerobic. So just my last thought in what to do with measures, um, in selecting them for men, you can utilize traditional measures, but be aware of the potential bias or in completeness. You can modify existing measures, uh, to use for males like focusing on muscularity instead of weight loss, but there's always challenges when you change a measure. Um, more ideally you can use measures that have been

developed or validated for both males and females or as is very common. Given the complexity of these variables. You may want to use a combination of measures to fully capture the, the breadth and scope of symptoms that are of interest. So I'll finish there and, uh, turn, uh, our attention now to, uh, Dr. Jason Nagata.

Jason Nagata (00:44:09):

Thank you so much. Um, Dr. Lavender, I'm just gonna pull up my slides. Um, so in this section, I'm gonna be talking about medical complications of eating disorders in boys and men. And I actually thought that I would start out with a case of a patient that I recently took care of. Um, so this is a young boy named Johnny he's a 16 year old male wrestler, um, who is referred to our eating disorders clinic. Um, he reported that he was encouraged by his coach, um, to wrestle in a lower weight class. And so he attempted to lose weight while maintaining muscularity. He did consume 2000 calories per day, but almost exclusively protein meets protein powders, protein shakes. He had two hours of wrestling practice for the team every day. And additionally worked out for three hours per day individually. Um, his parents reported that he had become obsessed with his parents and he was always in front of the mirror, checking his body, um, and weighing himself several times a day. He was seen in our clinic, uh, and his heart rate was 40 beats per minute. Uh, he was admitted to the hospital and overnight his heart rate actually reached the high twenties. Um, and upon further laboratory assessment, he was found to be anemic. So he had a low blood count, as well as zinc deficiency. He required hospitalization for 10 days.

Jason Nagata (00:45:44):

So eating disorders and results in malnutrition can cause significant medical complications affecting every organ system. Um, there's a limited, but growing body of research that has examined medical complications of eating disorders in boys and men. Um, and today I'd like to share with you some of the lit that literature. So overall here are some of the major organ systems that can be affected, including your heart brain, blood gut electrolytes, hormones, growth, and bone. And we'll try to cover each of these briefly today. I think, first of all, it's important to note that, uh, eating disorders can have quite high mortality rates, which is why they're so, um, important to be treated, um, and also to prevent this mortality. So, um, in this, uh, 2019 study, uh, in the international journal of eating disorders, um, 13% of, uh, males with anorexia and nervosa eventually died, uh, 11% of believing NIOSA, um, at 6% of, uh, other eating disorders or eating disorders, not otherwise specified. Um, and the mortality rates and males with Anex intervals are about six to eight times greater than the male reference population.

Jason Nagata (00:47:08):

The society for adolescent health and medicine has certain me, um, medical or vital sign criteria that could justify a hospitalization for eating disorders. Um, and here are some examples. So if you have a low heart rate, low blood pressure, um, or orthostatic vital changes, which means that if you go from lying, standing or sitting to standing, you have big drops in your blood pressure or big increases in your heart rate that can also put you at higher risk of passing out, um, or having a low body temperature because your body isn't able to maintain its own heat. Um, these are all potential reasons why, uh, boy or man might need to be hospitalized for a restrictive eating disorder now, while these guidelines do exist. I think it's important to note that, um, kind of similar for the assessment that Dr lavender mentioned, you know, a vast majority of studies that inform guidelines, um, have been conducted in female samples. Um, and because of that, much of the guidance is somewhat female-centric. Um, and in fact, there are certain parts of the guidelines that, um, only apply to girls and women. Um, and don't specify guidance for boys and men because of a lack of evidence.

Jason Nagata (00:48:27):

Um, here are a few examples of cur of current, uh, current, um, medical guidelines, um, from various professional and medical societies, um, that provide some guidance. Um, and I'll highlight a couple of spots where there are, continue to be gaps, um, for boys and men. So, um, one particular area where there are, are evidence gaps is related to, um, bone health and fracture risk in eating disorders for, for boys and men. Um, the current society for adolescent health and medicine guidance, um, says that given, uh, increased fracture risk, one should get a bone, um, scan or a DXA scan, um, when a amennary is present for six months or more, um, and a amen is, uh, lack of periods. And so, um, obviously this criteria, um, isn't applicable to boys or, or men. Um, and this is just one of the example, um, where medical guidance really only applies to female samples.

Jason Nagata (00:49:29):

Um, and as a result of this, um, even medical doctors and providers, uh, feel less comfortable taking care of their male patients with eating disorders. So, um, in over a hundred of society, FRAs on health and medicine, clinicians who participated in this survey over half felt more confident assessing bone density in females, and none felt more confident assessing bone density in males, um, likely due to the fact that there is no guidance, um, for male samples. So to try to address this gap, um, I actually, during my residency training, um, did a study that looked at gender differences in bone density. Um, and we actually found that despite the lack of guidance, um, males with Anorexia Nervosa had just as severe deficits in bone density at all sites, um, that were assessed compared to females with Anor nervosa. So overall their whole body bone density, um, and also specifically at the spine, the F femoral neck and the hip, um, all of these sites had equal deficits, um, for boys with Anor nervosa, then girls,

Jason Nagata (00:50:42):

Um, why we care about bone density is because it can lead to, um, elevated fracture risk. Um, so we also looked at actually primary care data from the, um, UK, um, using their health improvement network, um, and also compared fracture rates with Anex compared to, um, healthy controls without eating disorder. Uh, and overall we found that, um, in both males and females, there was a higher fracture risk. Um, for those with anorexia NIOSA compared to healthy controls, although in the males who are the circles, uh, the black circles here, um, that was only apparent later in life. So, um, at age 40 plus, but I think one of the important things about bone density is that just like puberty and growth, um, your growth spurt, um, you know, your critical time to accrue bone density is really in your adolescence and early young adult period. And beyond that, um, if you haven't gained your bone density, you won't be able to later in life

Jason Nagata (00:51:47):

Moving onto cardiac or heart complications. Um, one study actually found that, uh, of adolescent males who were presenting, um, to care or for a first assessment, uh, in the clinic, I'm actually over half of males had vital assignment instability that would meet the hospital admission criteria that I had mentioned previously. Um, and so rated cardiac or a low heart rate was noted in about 40%, um, and the mean orthostatic heart rate. So the change when you, um, go from lying to standing or sitting to standing was over 20 beats, um, per minute or 22 beats per minute greater. Um, and also 40%, um, actually had elevated total plus for all levels.

Jason Nagata (00:52:34):

Um, in the same sample, there are actually also significant electrolyte abnormalities that were noted. So about a quarter had low potassium and low phosphorus, whereas 9% had an abnormal magnesium and 4% had an abnormal chloride. Um, and these, uh, electrolytes or salts are very important for, um, storing energy and also just for, um, your heart and other vital organs to work, moving on to blood complications or hematologic complications. Um, a third of males, uh, assessed, um, had abnormalities in their human CCRI. So that's like your red blood cell count, which is important for moving oxygenated blood throughout your body. Um, about 20% had abnormalities in your platelet count. That's really important for your ability to do blood clotting, um, and almost a quarter had abnormalities in your white blood cell count. Um, and that's important for your immune function. Um, and specifically, uh, 10% had abnormal, absolute neutrophil counts and that's important for fighting bacterial infections.

Jason Nagata (00:53:42):

Um, so it's just to say that in the setting of malnutrition, actually, all of your important bloodlines can be affected, and these are all, um, what we know in male samples. Um, actually as a follow up to this, we recently, um, published a study, looking at, um, hospitalized, uh, adolescent males, um, and assessed them for anemia and zinc deficiency, and actually found that, um, half of the males who were hospitalized had, uh, anemia, um, and this was actually higher than the percentage, um, of girls who were hospitalized with anemia. So it was 50% in the males versus 18%, um, in the females. Um, and similarly about 24% of both males and females had zinc deficiency, um, so important to, um, assess for both anemia and zinc deficiency in, uh, male populations, as well as female populations with eating disorders, moving onto the liver. Uh, male sex is also associated with a higher risk of having, um, elevated liver enzymes or liver dysfunction.

Jason Nagata (00:54:46):

Um, and, uh, alt uh, is one of the labs that we use to assess for liver function. And while it is known to be higher in males than females at baseline, um, these elevations were also greater, um, uh, in eating disorders. And part of the mechanism that thought about this is if you body is in a starvation state and doesn't have enough, um, energy coming in through nutrition, it actually starts to, um, auto or, um, use the liver, uh, cells to actually help nourish your yourself. So it basically self eats the liver moving onto other gastrointestinal or GI complications, um, bloating nausea, stomach pain, uh, and fullness are common complaints, um, in anorexia OSA and other eating disorders. Um, and in general, your, um, digestive tract is lined with muscle, just like, um, you know, the rest of your body. So, um, when you are in a state of not having enough nutrition, um, the smooth muscle around your intestinal tract can slow down, um, just like, uh, a regular muscle being sort of out of practice. Um, and so it actually slows the transit of your, uh, digestion. And so studies have shown that, um, get like the time it takes for you to process food in the setting of the eating disorder can be significantly slowed, um, compared to healthy controls.

Jason Nagata (00:56:20):

Uh, another, I think important gender difference note is that, um, that actually growing teenage boys and growing teenage girls can have different nutrition and energy requirements. And so, um, in this study, we actually looked at, um, what were the energy requirements required, um, for boys versus girls, uh, among hospitalized adolescents. And we actually found that the teenage boys required a higher, um, amount of calories, uh, in order to be discharged, but currently our protocols and most protocols nationally are not sex specific. So oftentimes when, um, young people are admitted to the hospital for eating disorders, they're actually started at a standard, um, nutritional, um, prescription, um, and increased day by day. But we don't, um, you know, give boys more than females to start. Um,

and because of this, we actually found that on average, um, at our institution, um, hospitalizations for boys are actually two days longer than they are for, for girls.

Jason Nagata (00:57:26):

Um, and this is just, uh, the written up, uh, description of that. So at our institution and many others, Mo most hospitalized teams are actually started at about 2000 calories and then increased. But, uh, we found that actually boys needed 800 more calories by the time of discharge. So around 3,700 versus 2,900 in the females. Um, and because of this, um, it took them longer, uh, in the hospital.Moving on to endocrine or hormonal complications in males. Um, so being in a state of malnutrition can suppress, um, your brain and the hypothalamic pituitary gona access, um, in this, then this can lead to low testosterone levels in nails and, um, decreased libido or sex drive. Um, also over 10% of males have had abnormal thyroids simulating hormone levels, um, as well as 5.6% had abnormal, um, thyroid or T4 levels. So, uh, similarly in the setting of malnutrition, your hormonal access can check down leading to lower, um, important hormone levels.

Jason Nagata (00:58:36):

Uh, this is another recent study that we looked at actually vitamin D levels, um, and found that, um, actually 44% of teenage boys, uh, admitted to the hospital had vitamin D insufficiency or deficiency. Um, and similarly, um, when you get to severe vitamin D deficiency, there were actually a greater percentage of males who had severe deficiency than females. So 8.6% of males had severe deficiency compared to only about 2% of females. Another kind of related point is about growth. So there was, uh, growth suppression actually in 11 of 12 males that were studied in one's, um, chart review, um, and gross suppression actually preceded the detection of the eating disorder, um, by one to three years in these patients. Um, and so I think one thing that can be particularly alarming for, um, teenage boys is if they realize that this, um, set lack of nutrition and, um, starvation, malnutrition state can actually, um, make it such that they won't reach their full growth or height potential, um, that can be often a motivator for these young people to get back on track.

Jason Nagata (00:59:54):

Uh, and then finally, in terms of brain or neurological complications, um, there's actually been, um, evidence of, uh, structural brain changes. Um, just like all these other organs, a malnourished brain, um, you know, will have changes in, is in a starvation state. And so, um, in one study that had, um, brain like CT scans, um, seven of nine males had evidence of cortical aro. So basically, um, shrinking of the cortex of the brain. Um, so there can even be, you know, evidence of, uh, brain damage from CT scans. So just to, uh, summarize there's a limited, but growing evidence that eating disorders can affect all organ systems, um, in male populations, including heart, uh, blood GI, liver, hormones, growth, um, and the brain. And so it's really important, um, that we treat, uh, these young people appropriately. And, uh, also that we update our guidelines so that we have good guidance for, um, caring for boys and men with eating disorders.

Jason Nagata (01:01:04):

Um, and so, uh, actually most of the authors here have been involved in a book, um, that was published last year, um, providing some clinical guidance on eating disorders and boys and men. Um, and here are two professional societies that put out medical guidelines. Um, and I'm actually very excited to share that the society for adolescent health and medicine I'm recently updated their guidelines, and those will they're already published online, but, um, those will be actually in the November issue of 2022 for the

journal of adolescent health. Um, and actually we worked really hard to actually have a new position in this guideline, um, focused on boys and men. So, um, as I mentioned, like previous versions really didn't recognize boys and men at all, but there's now at least a physician within the medical guidelines, um, con uh, addressing some of the unique concerns in boys and men. Uh, but there's still more work to be done. And we hope to, you know, continue these studies to help, um, medical providers and physicians, um, to take care of eating disorders in boys and men. And with that, I'm happy to, um, pass it along to Dr. Tiffany Brown.

Tiffany Brown (01:02:33):

All right. Thanks everybody. Sorry for just taking a second here to get the slides going. Um, so I'm gonna be talking a little bit about the prevention and treatment of eating disorders in young men. And this is gonna be a pretty, uh, brief overview overall, but happy to answer any questions in, um, the panel. So, uh, just to give you an overview of where I'm going to go, I'm gonna talk about prevention first and focus on, um, the different types of programs that have been implemented, including mixed gender programs, and then, um, more specific programming to men. And then I'll talk a little bit about eating disorder treatment. Um, what we know about outcomes and recommendations for, um, mostly psychological related treatment in men.

Tiffany Brown (01:03:17):

So, um, just to give a bit of an overview here, um, there's several different types of preventative related treatments, um, that you can enact on different levels. And so just to walk through those kind of levels of classification from, um, the Institute of medicine, you can have universal prevention programs, and those are gonna be programs that are applied to the general population. So for example, if you're trying to present, uh, rather prevent eating disorders, um, in the context of young kids in like a middle school, um, you might just go into a classroom and whoever is there in the classroom, you kind of present this program too. So that would be a universal type intervention. And I will say that a lot of the prevention programs for younger kids are done in schools and are applied in this kind of universal general fashion. The issue for boys is that often the body image concerns as we've talked about, um, throughout kind of the, the talks today often tend to be more, um, female-centric.

Tiffany Brown (01:04:12):

And so the kind of unique needs, um, of boys or the body image concerns often aren't in incorporated into these, um, general or universal programs, then we have selective programs and these are ones that are, um, going to be focusing on a more specific group that has maybe a probably increased risk. So for example, if you were to split groups by gender, that would be more of a selective type program. Um, and then finally we have indicated programs, and these are ones where you're working with a population that has some sort of known risk, um, for, in the context of eating disorders. This could be people with body image concerns, as we talked about, that's a pretty robust risk factor, um, for eating disorders or somebody who's already engaging in subclinical, um, eating disorder type presentations, but doesn't have a full blown eating disorder. Um, and so I'm gonna kind take a little bit of a detour before I go into the actual, um, studies that we've done, um, and that others have done in the prevention space, but I wanted to, um, kind of circle back to something that, um, Dr.

Tiffany Brown (01:05:14):

Olivardia talked about and just sort of how these images of the quote unquote ideal man have changed over time. Um, so this is the original Batman. If you're a fan of Adam West, you might already know that.

Um, and then this is the more modern, um, Batman with Ben Affleck. And you can see that there's a really huge difference in a muscularity between these two images. And this is sort of what we're having in terms of the change in cultural scape of what young boys and men are kind of looking up to as the, you know, super, uh, kind of ideal, um, you know, figures. Similarly, we actually do have Superman here. So we have the original George, uh, Superman, George Reeves, and then we have he Henry Cavill, who is the more modern Superman. Again, you can see a huge difference here. Um, and again, these are things that are cultural messages that are shifting and, um, boys are becoming more and more kind of aware of, or maybe not cognizant of, but are more and more, um, getting internalized.

Tiffany Brown (01:06:10):

And, um, another thing that I just wanted to bring up is Photoshop, um, for a male images, it's not something that we often think about as a factor that could influence male body image, but we do are really well aware of the kind of, um, kind of wild Photoshopping, um, phase tuning, other things that can be done for women, but those can be done for men as well and are, um, and I think the insidious nature of this, maybe people not knowing about it actually can make it more problematic because, um, I think that men looking at these images might not recognize that they're doctored, but this is a image of, um, Justin Bieber doing an underwear ad. You can see from head to toe, um, you know, neck has been enlarged arms chest. Um, you know, his penis area has been enlarged his butt legs.

Tiffany Brown (01:06:52):

So everything, um, is grown bigger in the Photoshop image on the left. Um, and again, these are things that were exposing, um, young boys, young men too, and maybe not even recognizing that these things are not actually realistic or reflective, what, um, real men look like. So to jump back into what we do to actually kind of combat those messages, um, a lot of the prevention programs with that are focused on eating disorders in young men have been focused on dissonance based interventions, and these are the types of interventions that, um, I have worked on as well, and that our lab is, um, can produce. And I'm not gonna go into extreme detail about, um, the content of these, but the goal of all of these dissonance based programs is really to help, to invoke a little bit of psychological discomfort by having young men critique these cultural body ideals to be really lean and muscular.

Tiffany Brown (01:07:43):

And the idea is that by critiquing those ideals, you can help actually reduce the internalization of that lean muscular body ideal that Dr. Lavender talked about earlier. Um, and we do that through, um, in our group, basically four hours worth of content spread over two weeks. These are group sessions and they're also co-led, um, by a male peer co-leader. Um, so a young man who, um, is even in their age range of the population we're working with. And, um, that is really important just because of the context of, um, representation and peer modeling and having young men be able to be in a group of their peers, um, and talk about these issues in a really frank manner, not detail about the content questions, but all of the activities for these programs are really designed to, um, really help people to critique that appearance ideal for men.

Tiffany Brown (01:08:35):

Um, so then in terms of evaluating these types of programs, there have been programs that have done that work in a mixed gender context. So, um, one example is the body body project for all. Um, and this was a randomized control trial, and it was a universally applied program. So it was applied to, um, men and women who are interested in participating and they had groups, uh, mixed across, um, genders.

And what they found for effects for young men were that they did see, um, general improvements in body image and muscularity concerns, um, at the end of the program. Um, and it also a two month follow up, unfortunately they didn't see any reductions in that internalization of the lean muscular body ideal, and didn't see any impact downstream on eating disorder symptoms, um, which obviously is the goal of these types of preventative programs, but did do a good job on kind of tackling some body related concerns, which by no means is, is not a big deal.

Tiffany Brown (01:09:28):

That is really important as we've talked about. Um, another, uh, mixed program is the body project Mexico. Um, and this one was, uh, rather recently conducted as well. It was an open trial, so not having any comparison condition. Um, it was also universally applied. The unfortunate thing, um, from a perspective for young men is that they didn't analyze the data by gender. So we don't actually know what the outcomes were for men generally in the program. Um, and so again, that's something that hopefully, um, you know, can be investigated continually in these mixed gender type programs. Um, so then detouring a bit from the dissonance based programs. I wanted to talk about, uh, um, specific programming for young men, particularly athletes. Um, and so these were kind of the first set of programs, uh, largely within the literature that focused, um, exclusively on concerns that were relevant for men.

Tiffany Brown (01:10:20):

Um, and one of them a really famous program is called the Atlas program, our athletes training and learning to avoid steroids. And this is a selective type prevention program where it was focusing on high school athletes in particular, um, with the idea that they might be at higher risk as, um, Dr. Olivardia, outlined. Um, so the idea of what these programs, um, do is again, focus a lot on trying to prevent, um, AEG use and, um, the programs have been successful in reducing intention to use and actually use of, um, different appearance and performance enhancing drugs in athletes. And they do that, um, via these mechanisms of changing team norms around, um, kind of steroid use and the appeal of steroid use, and then also increase, um, the understanding of the perceived severity of steroids. And so it seems like that's how the program is working to reduce the use of AEDs.

Tiffany Brown (01:11:15):

Um, we also know though that, uh, AEDs use obviously is common within the context of athletes, but the biggest, um, kind of users and abusers of AEDs are really, um, you know, men who do not have, are aren't necessarily participating athletics, but are using these for appearance based reasons. And so, um, what, um, Zalliager and her group in Australia have done is to focus on, um, non, uh, to focus on boys in high school that are non-A athletes, um, and to use the same kind of program the Atlas program. And, um, she's demonstrated on her work that you can improve functional, um, and aesthetic body satisfaction. So feeling good about how your body functions and also feeling better about how your body looks as well as I'm improving, um, and kind of reducing attitudes, positive attitudes towards supplement use in, um, high school students compared to a control condition.

Tiffany Brown (01:12:07):

Um, and this work is continuing to be ongoing in Australia, which is great. So hopefully more work, um, coming up. And then recently the male athlete body project, um, is a dis or is not a dissonance based program. I, I apologize, but is a program that's targeted towards, um, male athletes with body dissatisfaction. So this is an indicated type preventative program, um, and focused, used, uh, uh, RCT

design and they found greater improvements in body satisfaction drive for muscularity and internalization of a specifically athletic ideal, um, after the program was over. So again, some really encouraging results there. Um, now I'm gonna jump in a little bit to the dissonance based programs that, um, have been specific for young men. Um, so again, coming back to these types of programs, and this is a lot of the work that our lab has done. Um, so particularly, um, we started this work in, um, kind of developing an indicated program for sexual minority men.

Tiffany Brown (01:13:04):

Um, so gay men, BI + men, um, and that was the pride body project. If you're interested at all in seeing the empirical article, I have a QR code linked, um, to pull that up here and I'll have some of those throughout the rest of the talk. Um, this was a randomized controlled trial, and it was, um, again, an indicated program. We ended up finding effects, I'll show you some similar and basically outcome slides in just a second, but we found, um, really strong improvements in a bunch of different eating disorder, risk factors, including, um, reduction in, um, body fat and muscularity dissatisfaction reduced drive for muscularity, um, reductions in internalization of a lean muscular body ideal. And we also saw importantly reductions in actual kind of traditional eating disorder symptoms, um, you know, binge eating, purging, those sorts of things, and so encouraging results there then, um, we and others have also expanded this program to men regardless of sexual orientation.

Tiffany Brown (01:13:59):

Um, and the first to do that, um, we're kind of, we were working simultaneously was, um, uh, uh, Janowski in the UK, um, and he developed the body project M this was an open trial that they did did, um, and it was selected to be inclusive only of males. Um, and they did find some post intervention changes in, um, muscularity dissatisfaction and internalization of that lean muscular body ideal, um, at the end program, but they didn't find that those, um, improvements were maintained. Um, and we were thinking that maybe that might be because, um, it would be important to have like more of an indicated prevention program for men. So men who already had body dissatisfaction. And so we were working on, um, the body project more than muscles, which is again, an indicated program for men with body dissatisfaction. Um, and I'm gonna go into those results, um, in just a second, but here's also the link if you're interested in pulling up the paper.

Tiffany Brown (01:14:53):

So, um, just to go through a little bit about the acceptability and, um, retention, we had really strong retention in the program over time, um, and actually better in our, uh, active control or active, um, intervention condition for the more muscles than we did in the control condition. We also had really highly acceptable, um, ratings across a variety of different outcomes, um, for the young men. So they felt that it was helpful in improving their, um, body image concerns. They were satisfied and they were, um, you know, wanted to recommend the program to a friend. And, um, again actually, did we got a lot of word of mouth, um, during this trial, which was really great to hear in terms of outcomes, we're able to reduce a variety of traditional eating disorder, risk factors, um, just to orient you to these slides here at one week is the pre-intervention scores.

Tiffany Brown (01:15:43):

Um, at week two is the post-intervention scores. And then week six is the one month follow up. Um, our, um, more the muscles program isn't orange here, and these red dash lines just indicate, um, community based norms for young men on that measure when they were available. So we're seeing

nice, consistent reductions across the board, um, for, um, body ideal internalization body fat dissatisfaction and bulimic symptoms. Um, but we also wanted to see if this translated to not just traditional eating disorder, risk symptoms, but more muscularity oriented symptoms as well. And so we did find, um, that the same pattern of results. Um, we had significant reductions over time in muscularity dissatisfaction drive for muscularity and muscle dysmorphia symptoms. So again, really encouraging. And we then wanted to know, not just does the program work, but how does it work? Does it actually work how we think it should by reducing internalization of these lean muscular body ideals?

Tiffany Brown (01:16:38):

And we did find support for that, both from the perspective of, um, body ideal internalization being the mechanism of, um, the program's effects on traditional eating disorder risk, but then also on, um, more muscularity specific risk. And particularly we were looking at the muscle dysmorphia, um, uh, muscle dysmorphia symptoms as was mentioned earlier. And so that was really encouraging that you can almost kind of kill two birds with one stone by targeting this lean muscular appearance ideal. You can help to potentially reduce both eating disorder symptoms, and then also potentially mu muscle dysmorphia symptoms. So future directions for this kind of work, um, we were able to replicate these results, um, with colleagues in Brazil, um, through six month follow up again in, uh, different, um, contacts outside the United States, which was really encouraging. And then we're currently running a, um, RCT of a virtual version of this program.

Tiffany Brown (01:17:31):

So just delivered like this via zoom, um, for young men, between the ages of 18 and 30 in Alabama and Georgia. Um, we're about halfway through our recruitment. Um, we had multiple sites and then, um, we are gonna be comparing this to an active control condition through six month follow up. Um, if you know of anybody who might be interested, there's a QR code to contact us, um, uh, for more information about the study, and this is all funded through the Arlene and Michael Rosen foundation. So real quick, just to jump into eating disorder treatment, um, I'm gonna kind of glide through this, but, um, I think you can probably understand from the context of what we've talked about so far that most eating disorder treatments like other, um, aspects, um, of the talks today have been developed and evaluated in women solely. And in fact, there's no empirically supported treatments for eating disorders in men.

Tiffany Brown (01:18:21):

Um, and none have really ever been explicitly investigated. Um, men are less likely to seek treatment for an eating disorder, and there's a variety of reasons why that may occur. Um, individual factors can include, like we've already discussed, um, sort of internalized stigma or shame around, um, an eating disorder, kind of being considered more of a, um, a quote unquote female problem or woman's problem. Um, and lack of self recognition about the seriousness of your own, um, symptoms, um, ambivalence about change and also knowledge gaps regarding what treatment would look like or how you would access treatment services, um, particularly for men. And then there's also social and structural barriers. So we've talked about lack of recognition, um, from a variety of sources, friends, family, medical providers, often don't recognize the seriousness and maybe are more likely to attribute weight loss or other eating disorder symptoms to mood, um, difficulties like depression than they are to an eating disorder in young men.

Tiffany Brown (01:19:18):

Um, treatments are often female focused. We have these cultural views that kind of, um, reinforce that sort of idea as well. Um, and we also have, you know, these social norms around, um, kind of, uh, discouraging help seeking for men. So all of those things play a role in men being less likely to seek treatment for an eating disorder, even though we know there's a lot more men out there that are suffering than come into clinics. Um, the good news is that overall once men actually do seek treatment, their, um, outcomes tend to be similar, um, to women. And this is a table I'm not gonna go into this in detail, um, of different follow up studies that have been done, but I just wanna direct you to the sample size in these they're all relatively small. And I think that just shows that, um, again, we need to do more of this work, um, and kind of aggregate across samples so that we can really understand, um, if there are any differences that we should, should be knowing about.

Tiffany Brown (01:20:10):

Um, alright. So then in terms of treatment factors to consider, so we've already discussed a little bit, um, the importance of considering masculine gender norms, um, and masculinity, how that may relate to even disorder presentation. It may not in some men, but it certainly does in many. Um, there also can be certainly shame around symptoms and so helping to normalize those is really critical. And there can also be stigma around, um, emotional expression for men within the context of treatment, maybe particularly for eating disorders because of the gender related stereotypes. So those are all important things to be considerate of. Um, similarly there are some recommendations from, um, Doug Bunnell and others, um, on what you can do in individual therapy, things again, like making sure we're normalizing, um, men's experience and symptoms using, um, male centric, language and metaphors when appropriate. Um, and again, being mindful of some of the things we've already talked about today, um, male specific physiological symptoms, recognizing that low libido can be something that a men might feel uncomfortable talking about with, um, providers, but certainly can be a consequence of low testosterone in the con the kind of restrictive cycle that, um, you know, often occurs in eating disorders.

Tiffany Brown (01:21:21):

So all of those things and how they might impact treatment are important to think about. And then in the context of group therapy, um, often again, most treatment centers are largely, um, composed of young girls and women, and many don't even take men, um, into their, their groups. But if they do, um, often it's still gonna be very, um, heavily gender weighted. And so making sure that, um, the concerns, particularly body image concerns are, um, adapted within group programming to be relevant to boys and men. And if possible, um, kind of best practice would be to add, um, male co-leaders again, just so that there's some sort of representation there and that, um, mirror there, um, being cognizant of kind of that, um, that gender difference in having, um, somebody who is, um, kind of within the, the context of the same gender there. Um, so with that, I'm gonna pause there. Um, thank you so much. I'm gonna pass it along to Dr. umm Emilio Compte.

Emilio Compte (01:22:32):

Hi there. Okay. Okay. I think you are able to see my screen now. Well, first I, I like to, to mention that I'm very grateful having the opportunity to present together with this wonderful panel of speakers. Um, I'm facing a challenge in this presentation, which is speaking about nuances in eating these photos and muscle dysmorphia in under study population in 15 minutes, I'll do my best to you with a picture that may contribute to a better understanding of body image and, um, disorders and eating disorders in these populations. Also important. I will provide a brief description of the minority stress model, which has been described to be associated with the onset and maintainance of eating disorders among sexual and gender minorities. Also, I'm gonna be making some comparison between publish and unpublished

data to illustrate the difference across male populations. Given the limited cross cultural research, um, available in a study by, uh, a study by and colleagues published in 2006, describe the trans, um, disorder, eating attitudes and behaviors among adolescents in Mexico City, using data from the drugs and alcohol prevention survey, which also assess other risk behaviors such as disorder.

Emilio Compte (01:24:01):

Eating. According to this study, there was a reduction in the tendency of endorsing in dietary restrictive behaviors through the late late nineties and the early years, 2000 with almost 12% of male adolescents reporting dietary dietary restrained by year 2003 contrary fear of gain weight increased from from 5% to almost 12% by year 2003. Also adolescent boys report, uh, higher frequency on binge eating up to 6.5% by year to thousand and three, and per behaviors increase from a marginal wine 0.3% in adolescent endorsing any type on parting behaviors to a 6.1%. Overall, this finding suggests that disorder eating attitudes on behaviors among Mexican boys follow an upward trend. This reduction in dietary restrain with may be associate with the increasing social pressure toward muscularity experiencing young male as describer in the literature. It has already been mentioned in this imparts that boys and men with an internalized muscular body ideal tend to follow a dysfunctional eating pattern that rise affected individuals to eat more in terms of protein based diet, as a mean to achieve the muscular ideal.

Emilio Compte (01:25:34):

When compared with adolescent girls, a study conducted in Argentina and published in 20 2010, showed that adolescent boys were less likely to report key disordering eating behaviors. However, after the first descriptions of reverse and muscle dysmorphia, we've learned that disparities across genders may be due to difference in body ideals pursued. And that the idea that men did not have that, um, were men were not affected by eating disorders may have been influenced by the assessment measures used as eating disorders measures, trend to assess the desires to lose weight and related behavior. In this regard, in a study that we conducted also in Argentina, we assess eating disorder risk through a traditional measure, the Eat 26 resulting in almost 4% of university male student in Argentina being at risk for eating disorders. However, when we use a measure designed to assess the right for muscularity, which is the core pathology of muscle dysmorphia rates of individuals are risk were disproportionate at higher, with more than 40% of participants being at risk for muscle dysmorphia.

Emilio Compte (01:26:55):

In a second phase of the, of this study at risk individuals were interviewed and prevalence rate of eating disorders, resembles findings from study in developed countries. Nearly 2% of college student had an eating disorders and were all cases of eating disorders, not other otherwise specified. However, prevalence rates for muscle dysmorphia was higher, close to 7% and together this prevalence rates are similar to the prevalence rates of eating disorders describes among college women in double face. Epidemiological studies conducted in developed countries. This finding suggests that traditional measure that assess eating disorders may not be sensitive for boys and men and failing to assess concerns about muscularity and own muscularity oriented forms of disorder. Eating may result in a considerable proportion of men with non-traditional forms of eating disorders, go unnoticed, (cough) sorry, consistent with the conceptualization of eating disorders and muscle dysmorphia college students with eating disorders, describe a desire BMI lower than their current BMI.

Emilio Compte (01:28:09):

A muscle dysmorphia participants reported a higher desire BMR compared with a current BMI. It was interesting that during the interviews, um, when, when participants were asked, uh, do you have a strong desire to increase your weight as opposed to the eating disorder examination interview question? Do you have a strong desire to lose weight muscle dysmorphia participants were most likely to clarify? Yes, but as long as it represent an increase in my muscle mass, if we compare unpublished data on the EDQ from the Argentine, uh, study with published norms with, uh, uh, among us college students who will find interesting differences, US college students score significantly higher than AIAN students in all EDQ subscales. And this may lead us to think that us college students are more prone to experience eating disorders as assessed by the EDQ than Argentinian men. However, there are differences in both samples, in addition to the mean age that may explain these disparities, US participants attended to a private institution while more than 60% of Argentina supple sample attended to a public institutions, which are free of charge in Argentina.

Emilio Compte (01:29:36):

You, you can get into, um, higher education to a university without going through a selection process. And if you choose to go to a public university, there are no tuition fees are totally free. So we're comparing this data. We are comparing two different populations. On the one hand, there is a population that can afford a tuition fee and has gone through competitive selection process to get into college. And on the other hand, you have a population that doesn't need to have a particular socioeconomic status in order to get into college. And it's most likely to drop out the, their studies before their first year finishes. However, proper, uh, cross-cultural research is needed to further understand nuances of eating disorders among men from different cultures, a cross-cultural study comparing Mexican and American college weightlifters or muscle dysmorphia, uh, dysmorphia symptoms what's published by Gino and pano. Similar occurrence of, of muscle dysmorphia were observed in both samples and contrary to author's expectations.

Emilio Compte (01:30:48):

Muscle dysmorphia was not as associated to acculturation to the North American culture by American weightlifters muscle dysmorphia was so associated with exercise dependence and eating pathology in both Mexican and American men. However, association between muscle dysmorphia symptoms and protein supplement intake and use was observed among American men and not within the weight lifters from Mexico concludes that given the lack of a significant association between a acculturation and muscle dysmorphia symptoms, similarity between Mexicans and American college weightlifters may due to similar access to the media after controlling for sociodemographic variables, it was suggested that Mexican college weightlifter may have been exposed to similar content in the media, then American peers, and that this may partially explain the similar muscle dysmorphia symptomatology across, um, samples.

Emilio Compte (01:31:55):

The triple tip model of influence described by Thompson and colleagues, proceeds individuals, uh, are exposed to social pressures toward, towards, uh, body ideals, but three main sources of influence parents, peers, and media. This model has been supported in many populations in particular Carlo Andre describe, um, evidence supporting this model in a large sample of Brazilian male university student in this regard, parental influence was in, uh, influence was found to be associated with body idea in internalization peer influence, explain body comparison, which is believed to be one of the underlying mechanism of the body ideal internalization process. And on the other hand, media influence ex explain both social comparison and body ideal internalization in turn body, ideal internalization and body

comparison behavior explains body dissatisfaction and muscularity dissatisfaction. And it was muscularity dissatisfaction. The one that lead to body change behaviors such as engaging in protein based diet, high coloring, consumption, and weight lifting this finding supports the idea that men across large cosmopolitan cities may be exposed to similar pressures towards muscularity from relevant source of influence, and that the internalization of body ideas, um, of, of muscularity body ideas will lead to muscularity dissatisfaction will in turn, will lead to body change behaviors, such as disorder, eating and weight lifting when analyzing the relationship between socioeconomic status and eating disorders and muscle morphia among men high maternal parental education was not found to be a significant predictor contrary to what it has been observed among women.

Emilio Compte (01:34:01):

This finding suggests that in families with high socioeconomic status sons may experience less parental weight, uh, concerns than their daughters do also related to socio-economical status. It has been described that food insecurity leads to an increase of eating disorder risks in terms of weight gain, due to poor quality diet or dysregulated eating, given irregular unpredictable access to food or effort in cognitive restraint to make food last longer, or to prioritize feeding children. Among gender and sexual minority men. The minority stress model is often used to explain health disparity. It has been suggested that among sexual minority men, um, they might be exposed to distal distresses stressors, sorry, such as social stigma and discrimination, and to proximal stressors such as internalized homophobia, transphobia, or concealment of their sexual or gender identity. And altogether, this may lead to an increased risk for development, physicals, and health issues, such an eating disorders with this framework in mind, recent research has suggests that compared to their heterosexual peers, sexual minority men are consistently at greater risk of, um, displaying our, a range of body image, concern, target behavior, binge eating, restrictive eating, uh, using diet pills among other behaviors.

Emilio Compte (01:35:43):

However, findings examining the desire to gain weight in terms of muscle mass suggests that sexual minority men do not defer from heterosexual men or maybe even at lower risk for muscularity oriented disorder, ed behaviors for the purpose of illustrating, um, differences suggested by previous research, I have compared, um, published data on the EDQ among undergraduate male students with recent, um, published norms among gender and sexual minority men participants in this study belong to the bright study, which is a large national cohort study of gender and sexual minority population in the us, which has a mean age around their thirties and 60 and between 60 and 80% of the participant has complete a college education.

Emilio Compte (01:36:43):

The left side of the screen shows findings from college men, as you can see average scores on restraint, eating concern, weight concern, shape concern, and global score of the EDQ are higher among gender and sexual minority men, notably gender and sexual minority men show high scores of weight concerns and shape concern. And this is even higher among gender nonconforming minority men. However, when we compare data from published norms of the muscle dysmorphic disorder inventory from the bright study with unpublished data of the M D D I among heterosexual us college student, it is notably that heterosexual men show higher scores on the pride for size of scales, which assess the desire to become bigger and muscular as well as higher functional impairment associated with training schedule compare with the participant from the bright study. This seems to support findings that suggest that gender and gen, uh, gender and sexual minority men may be at lower risk for muscularity, uh, oriented

disorder, eating however, consistent with the EDQ data, gender and sexual minority men show higher levels of appearance in intolerance.

Emilio Compte (01:38:06):

And this was even higher in gender nonconform nonconform minority men. I would like to make some final conclusions. Research findings suggest that Latino men living in large cities show, similar rates of eating disorders are muscle dysmorphia compared to previous finding among men from developed countries, acculturalization was not found to be associated to muscle dysmorphia suggesting that men in large cities may be exposed to a similar global culture that reinforced the muscular ideal body. And this was supported by the replication of the trip model of influence among Latino men, socio, um, socio, uh, economic status may play a key role on the manifestation of disorder, eating with food insecurity, being associated with eating disorders, risk gender, and sexual minority men tend to show higher levels of eating disorder psychopathology. And this is more evident for gender nonconforming minority men. And finally, heterosexual men seem to be at higher risk for developing mu muscularity oriented disorder eating. I hope that this presentation have in understanding of eating disorder and muscle dysmorphia in understanding understood and minority populations aiming to provide a proper care to affected individuals, Gracias and Thank you for your attention.

Dennis Barbour (01:40:02):

Okay. We do have some questions here. Um, let see here. Um, let me just, okay, can everybody hear me good? Okay. Here's some questions that we've got here. We've got a number of them. Um, the first one is my son has ADHD and I notice he eats impulsively. Is there a connection between ADHD and eating disorders?

Roberto Olivardia (01:40:40):

Yeah, I'd be happy to answer that. One of my other areas of specialty is an ADHD. And actually for viewers, um, partnership for male youth, we did a symposium on ADHD, um, recently that you can out, um, yes, their people with ADHD are at higher risk for, um, development of binge eating disorder and bulimia nervosa. We don't see that higher prevalence risk with anorexia that we see more comorbid with obsessive compulsive disorder or OCD. Um, but with ADHD, I mean, my practice, I see a lot of individuals who have both, I personally think for patients who have binge eating disorder bulimia, that they should be screened for ADHD. Um, having ADHD is affiliated with higher degrees of impulsivity, um, higher sort of need for reward and sugar and a lot of foods, actually that aren't the healthiest food, um, tend to have a higher reward, uh, sensitivity to individuals with ADHD.

Roberto Olivardia (01:41:41):

People with ADHD have very low interceptive awareness, which is basically a mindfulness of what's happening in inside the body. So paying attention to hunger cues, satiety cues, sleep cues, which are also things that people with eating disorders, uh, struggle with low interceptive awareness. So there are lots of aspects of having ADHD, um, just, and, and just executive functioning issues. I mean, planning meals, and even knowing when to eat, being mindful of your schedule, all of these things can impact people with ADHD. So, um, in fact, studies will show that if you don't, if ADHD is present and it is not being treated and identified, it will undermine the treatment of an eating disorder. So when people have ADHD and an eating disorder, um, you have to be treating the ADHD alongside it.

Dennis Barbour (01:42:37):

Um, the next question we have is it's kind of a long one. Um, how are you able to distinguish between body image concerns that most young people have at one time or another, and cause for concern, EG, suspected eating disorders, what are the warning signs that we should be looking for? Especially when we ask young people and they reply, perhaps honestly think they're just trying to be healthy and feel good about their bodies anyone want to talk about, uh, how do we, how do you ask young people? How do you engage young people in this subject?

Jason Nagata (01:43:13):

I can just start, um, by saying that, yeah. I think one of the, um, things about warning signs is that, yeah. I mean, as we as has been noted today, there's like so much body image pressures in for young people in general. And I think that like a third of teenage boys report that they're trying to bulk up or gain weight, like 25% are using some sort of appearance or performance enhancing substance, but not all of these people will have clinical eating disorders or muscle dysmorphia. Um, but some of these behaviors or attitudes could put someone at a higher risk for them. Um, to me it has to do with like, like functional impairment or, or quality of life. So when these thoughts about weight or appearance or food or exercise become like an, a preoccupation or even obsession, something that makes somebody feel worse about these behaviors or worse about their quality of life rather than better, um, or if it starts to become an obsession, those are, um, sometimes when I start to get worried.

Tiffany Brown (01:44:16):

Yeah. And I, I would just echo that from like a preventative perspective. Um, we do sort of drawing that line around impairment, I think is really important. And again, thinking about, um, you know, how much time you're also spending and thinking about your body, um, you know, what your maybe what kind of body checking behaviors, avoidance, other things that you're doing. Um, I didn't get to go into this in detail, but one of the exercises that we do in our programming is to help to kind of challenge some of those body related concerns, um, and give people to do things they might avoid doing. Um, so like, you know, being able to go, you know, shirtless at, um, the pool or to like to the beach or something else, right. Like things that are functionally gonna be more helpful, more comfortable. Um, and so if somebody is having really extreme avoidance of, um, their body that also occurs in muscle dysmorphia too, or can occur where people are again, um, you know, really uncomfortable, um, in that space also where again, it's causing problems is taking up a lot of their time. That's where we kind of draw that line. Um, and it can be hard because often those things can get, well, some of those things, or the behaviors can get reinforced, like over exercise, going to the gym a lot for young men. So again, it's thinking about, are you able to engage in those things and also engage in other aspects of your life? Or are you spending, you know, hours at the gym and not doing other things, um, because of that, because of these body image concerns.

Roberto Olivardia (01:45:40):

Yeah. And I would add a lot of times with patients that I work with when they start to discount other qualities and traits that they have, um, it doesn't matter how smart I am. If I'm at the top of my class, it doesn't matter how nice I am. Um, yes, maybe I won that art award because I'm so creative, but none of that matters because I'm not this particular body, that's a real cause for concern because the one thing that is clear is our appearance will change over time. Um, and granted puberty was certainly not fun for me. I'm sure it wasn't fun for a lot of people, but it, it, there's just involuntary things that happen in the body. And as we age, that's going to change your intelligence, your sense of humor, your creativity, those things are pretty crystallized. So when I hear young people who really discount those things, then I feel like it's, it's, we're heading into a pretty dangerous territory.

Jason Lavender (01:46:40):

Uh, the one other thing that I wanted to add, which I think builds on, on what the other speakers have said is that's something that I think to keep an eye out for and, this ties into the impairment, um, aspect is, um, sort of rigidity and inflexibility. Um, and I think especially with, um, eating, um, and then workout or exercise routines. So, um, increasing levels of rigidity and inflexibility, um, you know, especially to the point where it causes distress, um, or other concerns when the, the plan can't be followed, so missing a workout or not, um, being able to eat what was planned, um, when that leads to distress or it it's, um, high degrees of, of rigidity and inflexibility can often be a sign that there may be some more serious, uh, concerns going on there. Um, and that may take the form. Um, you know, particularly since we're talking about muscularity versus sort of restrictive eating, um, that could, that could look either way. It could be in terms of, um, losing control, uh, losing control, having a binge or, um, and not following a restrictive eating plan or in the case of muscularity oriented eating, it could be, um, you know, needing to access certain types of foods like proteins, um, at all times or things of that nature. So, um, just rigidity or, or inflexibility in, in both eating and exercise or workout types of behaviors is another thing that can be good to keep an eye out on.

Dennis Barbour (01:48:15):

The, uh, next question we have is, uh, thank you for your excellent suggestions for how to support and empower individuals. What can we do to also impact the context in which young men find themselves, which often involve harsh comments from peers in the pervasive media images slash messages that you mentioned in your presentations?

Jason Nagata (01:48:38):

I can start just by saying, yeah, I think it's so important to think about the bigger picture and policies and laws related to this, um, stuff, because obviously that creates the environment that these young men are living in. Um, and so just as a couple of examples, um, there actually are, um, currently some state bills, um, that are aimed to restrict the sale of like muscle, certain muscle building substances and, um, diet pills and weight loss, supplements to minors. Um, currently actually at a national level, um, the, uh, the FDA is not able to, um, regulate a lot of these supplements because of a 1994 congressional, um, federal law. And so it's sort of up to the state level right now to, um, protect minors from, um, some of these, uh, products which can basically just be bought over the counter by like a 10 year old.

Jason Nagata (01:49:33):

Um, and so there's actually, um, legislation in California and New York right now that has been passed by, um, both the Senate and the how, um, and the houses, and so actually is being considered by the governors now. Um, and then also, I think last year there was, uh, yeah, about a year ago, actually, there was a lot of, uh, media attention on, uh, Francis Hogan and sort of the Facebook whistle blower and how, um, you know, a lot of these social media companies were aware of impacts of body image. And I will say a lot of the media attention was on, uh, impacts on girls' body image, but I think there's, you know, some studies, um, although relatively less than, than the girls that, you know, show how, um, some of these social media can affect boys' body image as well. Um, actually some of these studies have shown that boys are more likely to have public followings.

Jason Nagata (01:50:21):

They're more likely to show off their muscles than they are like their faces. Um, they're also, um, use of Instagram is associated with, um, actually steroid use and, um, other performance enhancing substance

use and body dissatisfaction in boys. Um, so there's actually right now also a lot of discussion about more robust, um, regulations and laws for social media companies. A few that are sort of up for discussion right now are, um, first like more robust age verification. Technically if you're under 13, you're not supposed to be able to have accounts, but we know that like almost half, like a large proportion of under 13 year olds actually have accounts. So it's easy for them to just lie about their age. Um, another one is, as was mentioned earlier about these like filters and the ability to really manipulate, uh, self images, there's some legislation about, um, actually requiring if there is a lot of filtering going on, like, especially like in magazines or other media like that, they actually have to have some sort of disclaimer saying that this has been digitally altered. Um, and, uh, yeah, and, and I think it's just a lot of other discussion about how to protect, um, minors in particular, um, in the social media space from a sort of systems and product design level,

Tiffany Brown ([01:51:38]()):

Any oh, Emilio.

Emilio Compte ([01:51:41]()):

Yeah. In, in addition to what the, what, uh, Jason just said, I think that reaching out the community, it's very important. Some of these kids may experience first symptoms during the adolescence during high school years. And sometimes these behaviors are being reinforced because the, they are being as some who are eating healthy, who are very, um, uh, straightforward with the, with the physical activity. And this are being this, this, this, this, uh, red flags are confused with healthy habits. It's not weird that we are having someone who is having an healthy, uh, diet. We are having someone who is restricting the, the type of food who he he's gonna be having. And then, and also, um, it, it's not that we are against of a physical exercise, but one thing is to promote healthy, physical exercise. And another thing as my colleague have previously pointed out is when there is a, um, a functional impairment associated to the physical exercise. So it's very important to reach out to the community when the kids are still young and not reinforce, uh, possible early signs of muscle dysmorphia or the, or muscularity oriented disorder eating,

Roberto Olivardia ([01:53:12]()):

I think in addition to, I mean, I've spoken to health classes of fifth and sixth grade boys, I think to even give boys a language of describing their body image. I mean, I, I remember once giving this talk, it was to sixth grade boys and I had a colleague who was talking to the girls and I said, you know, do you, do you all feel that you might be impacted by some of these images? And, um, and it was very interesting. Me, all the boys were like, no, I, I'm not, I'm not affected by that. I'm not impacted by that, but these other guys are, but I'm not. And I remember this one young kid who's 12, 13 years old saying, you know, he doesn't buy into that. Like, it's almost against, again, this sort of norm of masculinity to even say that you're taken in, you know, by this, this imagery and, and this kid said, no, you know, I'm not taking in.

Roberto Olivardia ([01:54:03]()):

And meanwhile, he had his pants that were sort of lowered to show that he was wearing Calvin Klein underwear at, he was 13. Um, and I didn't wanna embarrass him, but I said, look, I, I find it difficult for, it's almost impossible to not be impacted by it to even give boys a language to say this, how could you not be basically, and to develop more of that media literacy and much what my colleagues were saying. I think part of this construct of masculinity is that more is better. And so even when I've spoken to gym owners and I said, you know, have you ever seen, let's say a woman who's clearly over exercising by

being on the treadmill for five hours and they'll say yes. And sometimes they intervene. I said, would you ever do that to a weightlifter who might be lifting weights for five hours?

Roberto Olivardia (01:54:53):

Like some of my patients do. And they said, absolutely not. I'd never do that. Like the discipline that it takes to do that is so even the construct of something like muscle dysmorphia is that takes discipline and dedication as opposed to people seeing it as a pathology and mu much what was mentioned before. I mean, during the pandemic, I mean, I saw, I mean, astronomical higher rates of how people were dealing with gyms being closed with not having the accessibility to, you know, certain things that really would show that kind of level of dependency that a lot of these individuals have to these behaviors.

Tiffany Brown (01:55:32):

And just to echo out onto that real quick, um, I think that just thinking about how we talk about, um, bodies of other people, our own bodies in front of other folks as well, those things trickle down, um, we call it what's called body talk. And that's something that we address in our interventions because it is so pervasive and, and a lot of men don't even realize that it's happening or that they're doing it, but talking about their peers bodies. Um, and again, I think on that also happens with families. A lot of that, um, stuff gets transferred down from parents. So I think just as, um, parents providers, you know, just people in the world, if we can monitor how we're talking and not, um, denigrating our own bodies or really talking too much positively, just like kind of talking more neutrally or talking about other qualities that people have, um, and making sure that we're being mindful of not commenting again on other people's appearances as well. Those things can go away to ultimately change these kind of cultural norms. It's one little bit, but something that you can do on a micro context that can actually have a downstream effect.

Dennis Barbour (01:56:30):

One last question, we have a number here, but interest of time, last question is what other clinical disorders are commonly seen with eating disorders? One of you want to take that?

Emilio Compte (01:56:47):

Depression, anxiety, sometimes different sort of anxiety disorders could be social pop, uh, um, obsessive compulsive disorder, um, substance abuse disorder. Uh, we have to remind, keeping mind that, uh, steroids are, are sort of substance that are used in some sort of medical treatment, but we are not able to, to go and get steroids out of a pharmacy so easily. Um, so, uh, steroid steroid disorders and other substance abuse disorders will be most likely to occur together with, uh, eating disorders.

Roberto Olivardia (01:57:34):

Yeah, and I think a lot of times, I mean, with the eating disorders like anorexia, for example, is conceptualize as being within this larger spectrum of the obsessive compulsive spectrum disorders. So with anorexia, for example, you'll often see things like O C D generalized anxiety disorder, uh, body focus, repetitive behaviors, things like trichotillomania, compulsive hair pulling, um, with bulimia neuros more in the impulse control disorders. So as I mentioned before, ADHD, uh, substance abuse, you know, things like that, but it, I would say it's more the norm rather than the exception that you'll see other clinical disorders with eating disorders. And sometimes they are just co-occurring and sometimes the eating disorder is this sort of coping mechanism for the other disorder, the depression, or the anxiety, sometimes it's the other way around. So it's very important for clinicians to make sure that whatever

diagnoses are on the table, that they're all being adequately identified and treated because if one is not being treated, it's going to undermine the treatment of the others.

Jason Lavender (01:58:43):

One, um, thing that I wanted to mention, um, also that just sort of related to this is that it's known that for a lot of people, the, the form of their eating disorder symptoms can shift over time. Um, so, you know, and individual, um, and this may be especially relevant to men who may present with more of a restrictive type of eating disorder, like anorexia NIOSA, and then develop more muscularity oriented behaviors over time, even if they're restoring their weight. Um, they may still have, um, severe eating disorder symptoms in a different form, um, or similarly restricting eating disorders, um, may resolve to a certain degree, but then shift more to sort of a bulimic spectrum disorder over time. So it can be really important to, um, not just assess and, and understand what a person's symptoms are at a given time, but to really understand what their symptoms have been, um, throughout their entire experience. Um, and to, to just recognize, especially if you're working with an individual with a certain type of disorder to make sure that you're evaluating the, sort of the full scope of the things we've been talking about today, just to ensure that, um, symptoms aren't shifting to a different direction, even if certain symptoms are improving.

Dennis Barbour (02:00:01):

Well, thank you all for your excellent presentations. Um, and to the viewers, just to reminder, uh, there will be a survey that will pop up immediately after. And if you could fill that out, that would be very helpful to us. Also, a reminder that there are three more symposiums that are, uh, that are scheduled in our series. And if you just keep abreast of our website and the main page, we'll have a, um, uh, listing of when those are and when they're going to occur. Um, finally again, thank you so much for joining us and we hope to see you in future symposia. Thank you.