

Orthodontics can help your child's oral health.

Welcome to SBH Bronx Health Talk produced by SBH Health System and broadcast from the beautiful studios at St. Barnabas Hospital in the Bronx. I'm Steven Clark.

The history of teeth straightening, or orthodontics, started back in ancient Greece and Rome as far back as 300 BC as archaeologists have found mummies from that era with appliances in their mouth that were used to maintain spaces and prevent the collapse of teeth. In the 1700s a French dentist wrote a book about methods for straightening teeth, widening the upper palate and reducing tooth crowding. Two hundred years later specialists began using various metals to create loops, hooks, spurs and ligatures to strengthen teeth. America welcomed the Society of Orthodontia at the beginning of the 1900s. By the mid-1960s, children in suburban America wore braces seemingly as testament to their family's affluence. In recent years, technology has enabled the field to grow in leaps and bounds and to make orthodontia available to many more patients. With me today to discuss orthodontics is Dr. June Harewood, an orthodontist and director of the orthodontics residency program at SBH Health System. Welcome, Dr. Harewood.

So I know we spoke about a month ago about orthodontics as not just being a cosmetic solution but also one that can make an impact on a child's oral health. Can you explain?

Sure. For many people it will be an aesthetic solution. For many people it may just be that in society they are seeing celebrities on TV with these very straight teeth and that's what they want for themselves or their children but for other reasons orthodontics can be vital and crucial to saving your dentition and to your function. For example for children who have what you know kids are kind of cruel might say buck teeth, for children who have upper teeth that are very far forward they will be at a higher risk of fracturing those teeth. Kids don't pay attention, they play they're hit by a ball or they fall down and so those teeth will be at a much higher risk of being fractured. For other people it may be that the way that they're biting, the way that their teeth come together is not proper. Your teeth should come together like a jigsaw puzzle in lock step and if they don't come together in that way you end up wearing away the enamel. We want people to keep their teeth forever. In 2020 there's no thought that when you get older you're going to lose them so if you're trying to keep your teeth for a lifetime it's really important to have them interdigitate in the proper way and those are just two examples of how orthodontics or having straighter teeth can be really vital.

For speech as well, right?

Right, for speech as well. Usually a child who has a speech impediment will have the help of hopefully a speech pathologist but often times they will refer to us as well because it's structure and function. So we can correct the structure the way that the teeth are coming together to create kind of a framework upon which the speech pathologists can use so that the tongue can have the proper positioning so certain sounds can be made with the combination of orthodontics and speech pathology.

Is it fair to say that orthodontia is no longer exclusively available to rich kids?

I would definitely say that and we're very lucky to live in a state, it's not in all states, but we live in a state where there's a state-sponsored insurance system called Medicaid that will allow if you qualify for Medicaid and if your malocclusion is severe enough it will cover the cost. It does involve you know coming to the orthodontist, getting a consultation, it involves an insurance approval process, but there are many people who are qualifying and having that service covered by the state and which is wonderful and we're very lucky to have that available in New York.

So if you're living say in the Bronx here and you're on Medicaid you shouldn't see this as something unattainable?

Of course it's not everybody who will qualify but we do our organization recommends at the age of seven that all kids be evaluated so usually at seven you have many, not all but many adult teeth and we're able to kind of guess and surmise a trajectory of your occlusion and at that time it would be great to just come in for a consultation so we can take a look and see whether this is something that might be right for your child or for you through the consultation process will know whether or not you'll be able to be covered. It doesn't hurt to try.

I know in my generation when you got braces it was typically early adolescence. I know when my kids got braces it was earlier than that. How old today are kids getting braces or getting orthodontia work?

Well it really depends what your teeth look like. The nice thing of seeing a child earlier at seven is there are certain things that we can do at seven that we can't do at 12. At seven or eight years old not only are your teeth in a transitional phase, your bones are actually in a transitional phase. Sometimes what we do isn't only moving teeth around, it's affecting the growth of the bones and if we see a child early enough there are we call them orthopedic procedures that we can do. This means that we're not just acting upon the teeth where we're shaping the bones and the development of the jaws. If we see a child early enough there may be some teeth that wouldn't naturally come in. Some people just have a very crowded jaw and there are things that we can do to make things easier later if we see children earlier. A lot of the time seven-year-olds come in and we say see us again in two years but it's for those critical subset of children that we need to see really early and do something early that it can be really helpful.

I guess the length of time that you need to wear these braces also differs depending on the situation.

Of course so usually if we're treating a child early, around seven years old or eight years old in that transitional dentition we call it phase one. So for phase one treatment we really try and keep it to within six months to a year and just try and get in, fix whatever that immediate problem is and allow the child to have many years before we evaluate again. We might need a phase two of orthodontics, phase two meaning we don't just have brackets on a subset of teeth, we have brackets on the top and the bottom teeth so that might be more similar to what you were talking

about getting the braces later. That's the full, complete treatment.

And also again in the old days they wore clunky braces. Now there are many different options.

It's funny because those metal clunky braces are still great. We still use them, they're still very functional and practical, but there are lots of different options now and they work for kids as well as adults so some of the options that we have now are those traditional braces that go on the outside of your teeth but are white colored so they're a ceramic braces that reflects the color of your teeth and might be a little bit less visible. You can also get clear aligners, the more popularly known term is invisalign but there are many different companies besides invisalign that will do these clear aligners which are basically a series of you can almost think of it as a very thin mouth guard, a series of them that you wear that gradually as you move from one to the next gradually straighten your teeth. Of course the nice thing about having a set of aligners is that you can take them out, you can put them in you, don't see them at all. You have access to your teeth and you're able to brush a little bit more easily. The other thing that we have are lingual braces so instead of having braces on the outside of the teeth we can put braces on the inside of the teeth. Sometimes it can be a little bit less than fun for your tongue, but you easily get used to it and those are all aesthetic options. I think these options have opened orthodontics much more to older patients. The oldest patient that I'm treating right now is well into her 70s and these options have just opened up a whole different world, a whole different generation to orthodontics.

What percentage of your patients today are adults?

So it's funny that you ask. I just looked at the statistics not knowing that you would ask this question. Of course it's still mostly kids it's 78 percent children but 22 percent now are adults and that's an increase of something like seven or eight percent over the last five to ten years.

So it's never too late?

It is never too late, definitely never too late and there are lots of reasons why people might get orthodontics that don't just have to do with straightening your teeth. Someone may want to get a dental implant, but the space has collapsed because we've been missing certain teeth. Sometimes we don't do braces on the top and the bottom. Sometimes we do very targeted braces to prepare a site for an implant. For other people they may not just have dental malocclusion they may have a serious skeletal malocclusion and we set them up for surgery or there are patients who have cleft lip and palate or different craniofacial disorders or differences and we can do that at any age or stage.

I'm curious when you started practicing as an orthodontist what percent of your patients were kids in those days?

Oh it's completely different and it might have been 10 percent maybe less than that. I'd have to lookback and see the exact numbers but it was very few. Invisalign started they got their FDA

approval in '99, in 2000 they started marketing to orthodontists and since then I think since the rise of these clear aligners the idea that we can straighten your teeth and nobody will have any idea at all. Maybe the last 20 years it's just been an exponential increase.

Are these options as effective as the older braces are?

They can be, but there's a little asterisk beside it because with invisalign, with the clear aligner therapy or removable therapy, it works really well as long as you wear it. So you really have to know yourself or you really have to know your child. If you're not the type of person who can wear something in their mouth for 22 hours a day. If you snack a lot and you don't think that you'll be able to keep that snacking or keep them in your mouth for 22 hours, two hours is a small amount, but it's very doable and the ceramic braces which are the clear braces are just as effective of course and the same thing with the lingual braces. There are certain malocclusions where certain types of braces work better, but all of them can work very effectively.

Are there also technologies in the office that may allow you to be more precise and more accurate in what you do?

Yes, thankfully. One of the most probably popular technologies that's come around is 3D scanning so one of the things we used to be able to do or have to do when patients came into the office is take a dental impression. If you've ever had a dental impression it involves taking a tray full of a gooey clay material, pressing it onto your teeth, waiting until that clay hardens and pulling it out, getting the suction out, and there's drool and there are patients who are gagging who can't tolerate it. Now we can basically just wave a wand over your teeth and your dentition magically appears basically on a computer screen and that computer screen creates a 3D replica of your teeth that is not only more accurate it also is faster in terms of our communication with the lab. Say that we're scanning for the creation of invisalign or a crown even, we can send that to the lab within 15 minutes there's no mailing there are no stamps it's sent through the cloud and they have all that information instantly.

I know cosmetic surgeons for years have had sort of given you a computer image of what you look like after you have a facelift or a nose job or what have you. You have that with orthodontia as well?

We do and especially with the 3D scanners we can create, sometimes it isn't the most accurate but we can at least give you an idea of what your teeth will look like at the end of treatment. Another nice digital technology is the cone beam CT which is a 3d replica. I'm sure you're used to going to the dentist and getting dental x-rays which is a 2D, a flat image of a three-dimensional structure. The nice thing about the cone beam CT is it takes a three-dimensional image so we can see your teeth on the screen. We can see where the roots are, we can rotate around and see the whole cranium which is great for planning orthognathic surgeries. It's great if some people have impacted teeth, teeth that are buried in the bone. We can't, we have no idea where they are and so we can better plan how to align your teeth because we have this technology.

Does that also help you move things along more quickly?

Of course because we can be more efficient and more effective. There's less guesswork. We can be much more precise.

You know I'm curious if you had orthodontia as a child is it likely that later in life the teeth sort of start to go back to their normal or revert back to where they were at one time?

Well that very much depends on whether you wear your retainer and a lot of my adult patients are patients who had treatment when they were adolescents, they may say I was less appreciative or I was less responsible at that time. They took the braces off and I basically threw my retainer in the garbage and in that case for some people your teeth will remain straight but for most of us our teeth are going to shift a little bit as we grow so I usually tell people we want you to keep your retainer for life or for as long as you want your teeth to be straight and so if you've gone through the process before and your teeth are now misaligned, which can happen, you can go back to the orthodontist and hopefully the treatment will be a little bit shorter, but yes you have touched upon one of the most important aspects of treatment. It doesn't end when we take the braces off. You really have to keep that retainer.

I'm curious. What made you decide to go down that path to become an orthodontist?

That's so interesting because I like dentistry in general. I like medicine. I like treating people, but the very nice thing about orthodontics is it's for the most part a very rewarding career in that you are able to stay with someone an average of two years for the treatment, often critical years. A lot of the time we see adolescents. We see them for every month over two years so we can not only see them develop, we see their smiles become so much better. There's a lot of job satisfaction in being able to give people beautiful smiles. I mean some people will say oh it's such a long time to be tied to one patient, but if you enjoy forming relationships if you like speaking to kids at that really fun age, which almost 80 percent of our patients are, orthodontics is just a really great career.

You have a very nice smile. Did you have orthodontia?

I did, but you know I didn't have it as a child. My family could not afford orthodontics, could not afford dentistry for many years when I was growing up and when I was in dental school, dental school is a great time to get braces because everybody who you're around is not going to judge you, they're actually going to probably follow you down the path of getting braces. So I got invisalign and then I entered orthodontic residency and became very very picky and I wanted very precise things done and I actually got braces for a while as well and it's the same in the orthodontic residency program. There's so many of my residents who had treatment before and are now getting it again because you know we also realize that we are a walking advertisement. Right, so we want our teeth to look good so that our patients have a nice model of what their teeth could look like.

Last question, if someone is interested in more information about orthodontics program here at SBH Health System is there a phone number they can call?

There is a phone number. I wish I had it off the top of my head I don't but you could definitely go to the SBH website and look for dentistry. You can get to us usually it's best if you get to us through the general dentist. We're going to want you to have a checkup before you come to see us. They make sure that there are no cavities and that your teeth are in a good position for orthodontics.

Okay well Dr, Harwood thank you for joining us today on SBH Bronx Health Talk. For more information on services available at SBH visit www.sbhny.org and thank you for joining us today. Until next time