

Covid-19. It's now a household word.

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.

A month ago during our initial podcast on Covid-19 we were only introducing the virus. We knew it originated in a seafood and live animal market in Wuhan, China and we feared it might find its way here. Now many of our worst fears have been realized. The number of Americans infected continues to skyrocket and the stock market has been roiled with no end in sight for either. Sports and entertainment venues have gone dark. Schools and restaurants have closed. People are no longer shaking hands. Travel is at a standstill and many of us are working from home and just a few days ago the president declared a national emergency. Today we know much more about Covid-19, but there's also a lot we don't know. Here today to update us on this is Dr. Ed Telzak, chair of the SBH Department of Medicine. Welcome Dr. Telzak.

So let's begin by talking about if your home, you don't feel well, you think you may have symptoms, what do you do?

Well, I would say in general, medical guidance would be you don't feel well you have symptoms, you go see your doctor. I think Covid-19 has really turned the world upside down and now for a variety of reasons there is a great emphasis, both clinical and public health, in keeping people with mild symptoms away from medical institutions. And let me explain if I might. Still the majority, the vast majority of people, especially young people who get infected and become symptomatic with Covid-19 have mild disease, will self-cure and though they are certainly capable of spreading disease to other people, if they remain in their home and they engage in self quarantine the impact from a public health point of view will be minimal and they will be fine at the end of the day. The notion that they need a doctor or any health care practitioner to say "come see me and let me tell you that you're going to be fine" has great danger to it and that's because in health care facilities, certainly in a health care facility like SBH, there are many elderly immuno-compromised patients who if they were to get infected with the virus that causes Covid-19, are the group that could actually have severe outcome and are the group that have significant mortality associated with it. It's absolutely essential from a hospital and public health sense to keep those with mild illness as far away as possible from those who don't have illness but have other immune-compromising conditions and in fact that's really the goal of much

of the social distancing that's occurring as we speak.

So when do you come to the hospital?

You come to the hospital when you're feeling very sick. You come to the hospital when you're feeling very short of breath. It's not like in the hospital there's a magic treatment that could cure Covid-19. You would get supportive care. Supportive care is often essential and many patients with severe disease actually do well, though they have a very tumultuous time in the hospital. But if you have mild, even moderate symptoms and you're young and healthy you don't need medical care to get you better. If you have moderate symptoms and you're elderly, over the age of 65 that's how I would define elderly, maybe even 60, and you have one of multiple underlying conditions, most notably I would say diabetes, lung disease, heart disease, cancer and hypertension that's when you need to seek medical care. Moderate disease and one of those underlying conditions puts you in the category of developing severe illness and that's when you should come. Now, you shouldn't just show up. You should call your doctor. You should let them know that you're coming and in the best of all worlds they should be prepared to give you a mask because control of the source case of the person who might have Covid-19 by putting on a simple surgical mask can do a great deal to limit transmission.

Well when you come to the emergency room. You don't call ahead right? There's no number to call ahead. You just sort of show up and I guess there if someone is perceived as having symptoms they're immediately given a mask right?

So that took a while to accomplish in most emergency rooms but certainly at present anyone who comes to certainly not only our emergency room but every emergency room I would go so far as to say in New York State, every emergency room in the state of Washington, every emergency room in the state of California, which are really the three epicenters at the moment, and probably many many other states, Florida, Boston they all have significant outbreaks. They are screened and they're screened for the symptoms that are not unique to Covid-19, nevertheless have those symptoms the likelihood of having the virus that causes Covid-19 is much lower and so everyone is screened for fever, cough, fatigue and in some places a couple additional symptoms such as sore throat for example. If you screen positive you're given a mask immediately and that already provides a level of protection for the staff. It's not absolute protection but it's relative protection and probably the most important thing you can do to limit spread. Nevertheless, the emergency

room is one area of enormous concern for spread of the virus. In our institution. what happens once you screen positive you're given a mask. You're sent to a very specific area in the emergency room where patients with ILI, which is influenza like illness. We have an airborne isolation room. More importantly now that the recommendations have been changed all of the doctors and nurses and in fact all the people who work in the hospital that entered that confined space have a mask, are gowned, gloved and have an eye shield and so they are effectively protected for virus that might escape from the patient if those symptoms are related to Covid-19.

There's been a lot of criticism about the lack of testing in hospitals across the country. Now there seems to be more testing. When do you get tested?

So still the recommendations are that if you have mild disease that it's really not that important to verify whether it's related to the virus that causes Covid-19. You just quarantine yourself for 14 days or for a period of time after you become asymptomatic, after you don't have fever for 72 hours, but primarily quarantine yourself for 14 days because we don't want to mix the mildly ill or the worried well with those who are immune-compromised that group does not get tested. If you're older, if you are immune-compromised, and you have those moderate symptoms that's when you get tested. I would also say a group that's critically important to be tested is our health care workers and so when health care workers have exposures they're generally put on quarantine for 14 days. The problem with that is you can burn through hundreds of health care workers very quickly. We've had probably in the hospital now we have eight to ten rule out Covid-19 patients and one or two confirmed Covid-19 patients, but a lot of the work we're doing at this point is really preparing for what we hope won't come but what we're fully expecting, which is really a surge of patients within two, three, four weeks that will have Covid-19, many of whom will be older, immunocompromised patients, many of whom will have moderate, severe disease, some of whom might need ICU and ventilator support and unfortunately a small number but a significant number might die and so that's really what we're preparing for to make sure that when that time comes we have everything in place. We have the doctors, the nurses, the respiratory therapists, environmental services people to really gear up for what we expect to be an extraordinarily challenging period of time.

Do you think hospitals in general are prepared for that surge?

So just for the audience, the way the outbreak is currently being thought of now and the way

control is being thought of there are two terms that have become very commonplace in the public health and clinical arena and that's containment and mitigation. So containment means that if you find the person who's infected with the coronavirus that causes Covid-19, if you find that individual you quarantine that individual and you quarantine all of their contacts, all of the people that they've interacted with I'd say in a minimal to moderate or greater way. That's containment. The thinking behind containment is that you could limit spread and that most people who will eventually develop the infection you can find the person who gave them the infection and that's containment. We're well past containment already. I think our inability to do testing early on has now made containment a smaller piece of the overall strategy and the overall strategy now is mitigation which means that you're basically assuming that everyone potentially could have the virus, whether they're symptomatic or not, and you keep people away from each other. There are certain criteria, but basically they don't congregate in large numbers and increasingly in smaller large numbers. They really sort of stick mostly to their house and you know you're allowed to go if you're asymptomatic it's sort of permissible at the moment to go shopping, to do critical tasks, go to the pharmacy to pick up medications, but in terms of going to a restaurant, going to a bar, going to a movie those things are out and in fact society more generally has taken that decision away from the public and so for example today the schools in New York City have closed, tomorrow the bars, the movies, the restaurants will close, all the opportunities for people to congregate and I might say last week the NBA, the NHL, all the large sporting arenas in New York and now around the country have closed so the opportunities to congregate are slowly being eliminated. In New York City we still have the subway system and I hope in the not-too-distant future despite all of the repercussions that that's going to have, the subway system will close so people will not be able to congregate and that ideally will result in taking the peak of when infections will come to hospitals and spreading it out over a much longer period of time. That transmission will be slowed, maybe ultimately decreased but more importantly for mitigation that instead of seeing thousands of patients in a couple of weeks those thousands of patients in a couple of weeks we will see over many months which means that hospitals will actually be able to take care of those patients. If there are you know many many tens of thousands of patients with severe disease who come to New York City hospitals we just simply don't have the ability to handle that. So mitigation is really trying to control the epidemic in such a way that hospitals will have the capacity to treat smaller numbers of patients over a longer period of time and one of the real challenges with Italy now which has a mortality rate of over seven percent in a part of Italy where health care is acknowledged to be excellent, the northern part of Italy, Lombardy, the Milan greater area, the mortality rate is shocking, it's several fold higher than in China, and it all has to do or primarily it has to do with a very large

peak over a short period of time and just overwhelming health care facilities so in New York we're hoping that these dramatic interventions of keeping people away from one another will spread out the epidemic and so that facilities will be able to deliver the care that patients will need. We'll have enough ventilators. We'll have sufficient numbers of doctors, of beds to really get people through this well.

I would hope that we've learned from those countries that have done it well like I know Taiwan, Hong Kong, Singapore have been applauded for how they've handled it versus Italy which didn't do a very good job and even though I think we started a little slow, in getting our act together, do you feel that we've caught up and we still have the opportunity to meet our goals and being more like Taiwan, Hong Kong and Singapore than Italy?

I don't know that anyone can predict it except to say that if we don't initiate very soon and in a very widespread manner these, what I would consider draconian interventions, we know that we're gonna get this onslaught of patients, this surge, that we will not be able to care for. Our only choice at this point are these dramatic interventions and I'm sure it will have some effect, whether the effect will be sufficient, time will tell.

Do you think the weather is on our side? The fact that it's getting warmer?

The virus that causes Covid-19 has often been compared to influenza. Some of the comparison is a very legitimate comparison. I think the virus is transmitted the same way causes in most patients, an illness that's virtually indistinguishable from influenza. Influenza we know from decades of closely monitoring numbers and cases and the seasonality in the mid to late spring every year predictably either disappears or the rates go down dramatically. Clearly there's a hope that the same thing will be the case with this particular coronavirus, but as some people have said hope is not a strategy and I think we don't know whether there's a seasonality to this virus. This is a virus we've never seen before, though we've seen very aggressive lethal corona viruses before with SARS in 2002, 2003 and MERS they never lasted as long, they never infected so many people. They were more lethal in a certain sense, but they were much less transmissible. So ultimately I think we'll have to see whether there's a seasonality to this virus. I think there's no one who could say with any degree of confidence, even our president doesn't know time, will tell. I think that would be an unbelievable gift, but I think no one is relying on that to happen and the plans really throughout, you know the Bronx, the city, the state, each individual hospital is really

working full steam ahead to try to do what they can do to be prepared.

You've been an infectious disease doctor for a long time, you've been around the track a few times, is this the most concerned you've been?

I've been concerned about other infectious diseases and let me just say I'm very very concerned about this. So I was an intern in 1980 and I remember seeing my first cases of young men, my age, who were dying of his infections that you know the gray bearded infectious disease physicians didn't know what to make of and it took several years to figure out how to do a blood test to identify the virus, to figure out what the virus was, and no one was entirely sure at the beginning how it was transmitted. It was clear that there were high-risk groups, but could you get it from sweat? Could you get it from touching someone? It was a real concern. So you know I would say if I had to compare it to a different era and infectious disease in my practicing lifetime it would be HIV/AIDS but the ferocity, the growth, the widespread transmission that is really of a different dimension than HIV.

Let me ask you one more question from a practical perspective if somebody, an elderly person is at home and they have certain symptoms and they seem to get slightly better but then it gets worse again that's the time I guess they shouldn't fool around. They should come to the hospital right?

I would agree so if I can just personalize the situation. So about three weeks ago my 95-year-old mother moved from an assisted living facility to, I have a small apartment in the ground-floor apartment that she moved into with a 24-7 aide. I try to visit her every day, since it's in my house, it's easy to do. Her assisted living place is now on lockdown so no one is allowed to visit and all the benefits of an assisted living place, of congregate eating, activities, they've all been dispensed with and stopped. So I feel fortunate that she you know now is closer; that she has a less constrained life, but every day that I go downstairs I'm sort of 20% doctor, 80% son I'm always assessing you know did she cough, is she sweating, might she have a fever, my threshold for bringing her in to a health care facility, certainly if she looked sick, would be low. I mean we have very clear directions about how much she wants us to do. I would say to answer your question more directly and less personal if an older person has a sustained illness and is looking sick they should certainly come to the hospital. If 9-1-1 is called the 9-1-1 operator should know that if possible that the person has a cough and a fever so that EMS can put a mask on the

patient right away and that they too can wear a mask although they may be wearing a mask all the time now.

Are you concerned that by going downstairs and checking with your mother because you work in a hospital where you deal with patients, that you could be infecting her?

Absolutely and that's an absolute concern I have and I've had that concern you know for weeks, but I think at this stage in her life she really needs these social interactions. I don't think she fully comprehends that there's this pandemic and you know in the world and that's why you know people aren't visiting her she's asking all the time about why aren't her grandchildren, visiting a great grandchild and I explained to her that it's not safe at this time and as soon as they can and I think we're gonna be moving into the video chat world so that she can at least see them, but I am very concerned that I in fact might be the person that that infects her.

One other question. I see a lot of people wearing masks, some of whom I assume are concerned about spreading colds or whatever they have, but I think also many are doing it protectively. Is there any value in that?

Certainly the party line is there's no value in it, so I could say when we've recently instituted in our hospital all of the not only doctors and nurses but all of the hospital personnel that go into a patient room, whether we're concerned about Covid-19 or not, are protected from acquiring Covid-19. Not every patient who turns out to have Covid has read the textbook and presents with the classic symptoms. Sometimes you know they have more unusual presentations or they're not fully appreciated or they don't reveal what their symptoms are and only later in the course of speaking to the fourth doctor or the fifth doctor doesn't become apparent that this patient is at risk. So protecting our workforce our health care providers is so essential to keep the hospital functioning and to ultimately be prepared for when the surge comes that we've taken the unusual position that we're going to assume for now that every patient admitted to the hospital has a high enough likelihood of having Covid-19 that we need to protect our House staff, our physician staff and our health care staff.

Right and the masks that they're wearing are different masks. Those are the N95?

Well they've changed you know. This is a very rapidly evolving field in so many respects. Up

until this weekend there was a very specific mask so there's a distinction between droplet transmission and airborne transmission droplet transmission is how influenza is transmitted it's basically the virus is in a droplet, typically saliva, and because it lives in the droplet that droplet is heavy, the droplet falls to the ground or falls to a hard surface within 4 feet, 6 feet typically of a cough or sneeze. Airborne is where the virus in a much smaller droplet becomes dispersed in a much wider area and actually stays in the air for a much longer period of time. So there's one mask for airborne and 's tuberculosis is airborne for example, and there's a different much more comfortable much less expensive and technologically sophisticated mask for droplet. The virus that causes Covid-19 was thought of as being airborne, even though many people felt it was droplet, there was a much more conservative point of view. Air airborne is a higher level of protection and this weekend they changed it to droplet. So they wear a typical surgical mask and the surgical mask that we're using now have eye shields and so the eye shields since any mucosal surface and people, you know, touch their eyes all the time which is why you need to wash your hands all the time the eye shield protects you from getting infected through that route. You know your eyes, your nose, your mouth are all covered and so that's the primary route of entry of the corona virus now.

So the truly latest information it's probably in the New York Times or some comparable online daily or multiple times per day publication. What city state federal policies are typically available through newspapers, through al daily periodicals. I think a deeper dive into it it's really through three websites that I would suggest one is the Centers for Disease Control, one is the New York State Department of Health and one is the New York City Department of Health. The city and the state reference CDC guidelines a lot, but there were really policies that are unique to New York City and New York State. The response to this epidemic has very much been on the state level not on the federal level, the federal government has largely been absent in terms of certainly mitigation strategies and the like and so most of the decision-making that's been important, perhaps, other than curtailing individuals from China from entering at the very beginning have really occurred at the state level and I think in fact Cuomo has done a very credible job in my estimation.

I just like to add that information, that contact information is on the SBH website so anyone who's interested in getting the latest can go to the SBH website.

That's correct.

Dr. Telzak, thank you very much for your time today. For information on services available at SBH Health System visit www.sbhny.org and stay healthy, and thank you for being here today.

And wash your hands.

Yes wash your hands