Weekend Warrior: Exercising on the Weekends can be enough

Transcript Details

This is a transcript of an episode from the podcast series "Frankly Speaking" accessible at Pri-Med.com. Additional media formats for this podcast are available by visiting https://www.pri-med.com/podcast/frankly-speaking-episode-5-weekend-warrior

Dr. Frank Domino

Welcome to Frankly Speaking. I'm your host, Frank J. Domino, MD. I'm a family physician and professor at the University of Massachusetts Medical School in Worcester, Massachusetts. Today's topic is something that's right out of the news headlines. We've all been hearing about exercise. With me today is Dr. Alan Ehrlich. Dr. Ehrlich is an associate professor in the Department of Family Medicine and Community Health at the University of Massachusetts Medical School. He is Executive Editor of DynaMed, an online database of best evidence. And he's the former chair of Family Medicine at Saint Vincent Hospital here in Worcester. Welcome Alan.

Dr. Alan Ehrlich:

Hi Frank, thank you for having me on today.

Dr. Domino

My pleasure. Alan, can you tell us a little bit about what the current recommendations are for exercise?

Dr. Ehrlich

So, the World Health Organization as well as national organizations in the United States, in the United Kingdom all agree that there's targets for physical activity that most patients, most citizens should try and achieve. They agree on the total amount of exercise, which includes 75 minutes a week of very vigorous exercise, or 150 minutes per week of moderate exercise. In

addition, everyone is recommended to have at least two sessions per week where they're doing strengthening exercises on all your major muscle groups. What we don't know is, in terms of that 75 minutes of vigorous activity or the 150 minutes of moderate activity, how that should be spread out throughout the week. There's no solid evidence to-date that has guided the recommendations, and so there's soft recommendations within the texts that suggest this should happen in at least three episodes per week of exercise.

Dr. Domino
So, Alan, it sounds like we have good data on how much time people should exercise but the hows and whys of it remain unclear. Can you tell me a little bit about the recent article that was in JAMA on exercise?

Dr. Ehrlich
Sure. So this study was out of the UK. They looked at people in England and Scotland and this involved face to face surveys of people about their health habits. And there were about 60,000 individuals and what they wanted to know was how people who met the recommendations for total amount of exercise compared to people who either did it in a narrow number of sessions, one or two per week, which they typically would fall on the weekend, they would call them weekend warriors. They would compare that with people who got it stretched out throughout the week or people who got less exercise than was suggested and finally all those three groups were compared to people who were completely inactive, very sedentary in their lifestyle. So, the four groups that they had, this was not a randomized trial, so they were not of equal sizes. In fact, two thirds of the participants were people who were completely inactive with a sedentary lifestyle.

The smallest group was the weekend warriors. In any event, they looked at health outcomes for each of these three groups in terms of overall mortality, cardiovascular mortality and cancer. What they found was that any degree of physical activity was good. If you got less physical activity than the total amount recommended, so those people were described as insufficiently

active, or if you compressed it into just one or two days, you still got most of the benefit that the people who were exercising at least three times a week achieving the target number of minutes found, compared to people who were inactive altogether.

Dr. Domino
That's remarkable. So, was that true for all of those categories, all-cause mortality, heart disease and cancer?

Dr. Ehrlich
Yes. The reductions for all-cause mortality was about 35% in each of the three groups. They did a number of analysis. Again, it wasn't randomized, so you have to take into account, gee, is it people who are more healthy in the first place that are actively exercising? Is it people who have chronic diseases that find themselves sedentary? So they adjusted for comorbidity, they adjusted for BMI, age, sex, a number of things. And in multiple analyses, regardless of how they did the adjustments, they found that the benefits carried through in all three groups who at least had some degree of physical activity.

One of the questions that naturally arises is, "Well, gee, if the group that was insufficiently active got benefits also, perhaps we don't need to be doing so much exercise and we can still be achieving the same health benefits?" So they did a separate analysis where they compared the weekend warriors and the people who were fully active, to the people who were insufficiently active. In that case, the weekend warriors did not have a statistically significant advantage over the insufficiently active group but the people who were meeting the recommendations did show benefits over the insufficiently active group. So, it still overall supports the recommendations, but the bottomline... And in fact, actually, if you look at the current recommendations, they all say this, some exercise is better than none. So, for patients who are asking about what they need to do, if it seems like getting 150 minutes of brisk walking is too high a hurdle for them to achieve, they shouldn't be discouraged. Anything is better than nothing.

Dr. Domino

So, yeah. So just to summarize, it sounds like not meeting the 150 minutes per week guideline has little impact, or not meeting the 150 minutes per week recommendations from the guidelines, may confer a slightly lower risk. But if your opportunity to exercise is just on the weekends and you can compress a day or two of good exercise there, you'll lower your risks for all-cause mortality, heart disease mortality, and cancer risks. Is that correct?

Dr. Ehrlich

I think this study supports that claim quite a bit. Again, it is a cohort study, and that has some natural limitations.

Dr. Domino

Alright, so speaking of limitations, what are the other limitations of the study?

Dr. Ehrlich

Well, first of all, the patients self-reported their activity. So, when someone says, I exercised 150 minutes a week, is this somebody who wishes they exercised 150 minutes a week? So we don't know that those people truly are doing what the guidelines say, and so that may underestimate the benefit of meeting the guidelines. That would be one thing. The second thing we don't know is if they exercised too much. We know from other data that people who run marathons all the time actually increase their risk of heart problems. They may be straining themselves too much. So, you don't have an upper limit on that group that's active and that may introduce some bias there as well. The group that is insufficiently active, again, we don't really know in what way they were insufficiently active. That's a large range from one minute to 74 minutes of activity a week, and so is just walking out to the mailbox considered activity or not? There's a lot of that stuff that they didn't spell out in the article.

Dr. Domino

Alan, I have my chat with patients, they'll say, "Oh, I exercise, I take the dog for a walk every day."

And when I take my dog for a walk, he inevitably needs to stop about every eight feet, and so I don't really feel like I get much exercise, and I don't suspect patients who walk dogs get as much exercise, if their dog is similar to mine. How much, how would you use this information when you're talking with a patient? If they say, "Oh I walk my dog for 20 minutes every day. Is that adequate?"

Dr. Ehrlich
So, first of all, I think most people who have dogs and walk their dogs, are getting activity. I think getting a dog is a great way to get out. Because I have cats, and you open the door and the cats go out, and I get no exercise from that. So, I do think that dogs are a great way for patients to have both companionship and to get physical activity. Your point about stopping frequently is well taken, and what I would say in regards to that is that this would qualify for moderate activity at best. This isn't vigorous activity, but this would fall in that category of insufficiently active, where something is certainly better than nothing, and I think it's a great way to start. It gets people to get off the couch, get up, go outside. Once you're outside, people often walk more than they intended to just because it's good to be outdoors.

Dr. Domino
And I totally agree with you. I think sedentary is a big problem. And in my home, it's not uncommon after the evening meal, to sit on the sofa, and just sit there for two or three hours. And I often think that's probably the worst thing I could do. When I think about my great grandparents and my grandparents, living back in Italy, after they finished their evening meal, they walked to the center of town, and that was when they had their social network going. They didn't sit and watch Jeopardy.

Dr. Ehrlich
I think your point is really good, and any type of activity like that is important. What's particularly important for people of our age now, is that many of us, have not just sedentary evenings where we sit and watch television, but sedentary time throughout the day. If you have a desk job, I

mean many physicians or nurse practitioners are obviously up on their feet throughout the day, but if you, for your patients, if they have desk jobs, they may be sitting six, seven hours a day looking at a computer screen. And, it's very clear that for those types of people, they can reverse a lot of the weight gain and other adverse health affects that come from sitting all the time, by having some type of regular activity at some point in the day.

Dr. Domino
So let's talk a little bit about some specifics. Patients always ask me, "What should I get my heart rate to, doc?" And I don't know how to answer that.

Dr. Ehrlich
So, for vigorous activity, typically the recommendation is to achieve about 80% of the maximal predicted heart rate, which would be 220 minus their age. In general, when I recommend to patients what they should do, for moderate activity, I would like to see their heart rate get up over 100. And, nowadays, people have all of these health trackers; the Fitbit, or the Apple Watch, things like that. And these things will not only count steps when they're walking, they will monitor their heart rate, and they can give them a lot of feedback that before, what we used to tell patients, "Stop, check your pulse". Half the people didn't know how to do that, or that was too complicated. So there's a lot of technology today that supports being more active for people. The type of activity can vary whether it be riding a bicycle, walking, or other things that people find enjoyable.

Dr. Domino
Great. Keeping in mind that this study is really informative, can you just remind us again about what the guidelines are so that in the event... So we know what the standard of care has been. Although it may change in the future, what are the current guidelines with regard to exercise?

Dr. Ehrlich
So I think the current guidelines that clinicians need to be aware of, and again, if you are

certifying in the near future you would be following the national guidelines as they exist now and that's a total of a 150 minutes spread throughout the week. The guidelines don't specify that it can't be in one or two days. But 150 minutes of moderate activity which is typically classified as brisk walking, which is not you're in the shopping mall and you stop at every store, you look around. But continuous walking, it doesn't have to be fast. Just steady walking at a good clip, 150 minutes of that or 75 minutes of vigorous activity, and with vigorous activity, I would expect the heart rate to be getting up, 110, 120, somewhere in there that people typically associate with playing a sport or jogging or something like that. In addition, two sessions of muscle strengthening activity a week would be the minimum recommended.

Dr. Domino
Great, well then just to summarize, this study tells us that at least some exercise is better than none. Compressing your exercise maybe just to the weekend or one or two days a week probably provides you with the same heart and cancer benefit as well as all-cause mortality benefit as someone who exercises on a regular basis with the assumption that those limitations you described earlier may have shifted the data a bit. Does that sound about right?

Dr. Ehrlich
That's about right. The one final caveat is people sometimes worry that the people who compress all of their exercise into one or two days on the weekend, because it's happening in such a short amount, may put themselves at increased risk for injury. This study, there's no data one way or the other on that, and that's always a concern. That's one of the reasons for spreading it out in smaller amounts, but the bottom line is, work with your patients. Whatever they're willing to do in the way of exercise, try and get them to do it. If they can achieve the total number of minutes in one or two sessions, that should not be discouraged.

Dr. Domino
Great, thank you Alan. Our guest today was Alan Ehrlich, Associate Professor in the Department of Family Medicine and Community Health here at U Mass. I appreciate your review of this article

and your discussion makes it very easy to clinically apply. I'm Frank Domino, Professor here at the University of Massachusetts and I want to thank you for listening to Frankly Speaking. We hope to see you next time.