

## **JOSÉ WILKER**

## natural death or avoidable anomaly?

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The actor José Wilker dies suddenly, at age 66, from a probable infarction accompanied by ventricular fibrillation. A sad fact: a great actor in such a productive phase. He will be missed. As a consequence of the fact, the idea that something better should have been done in order to prevent his death: he shouldn't have died. In the common mentality, José Wilker's death, while so young (really?), is an anomaly.

Is it really? How abnormal is this occurrence?

An example of this line of thought was the article "Revista Isto é" published after his death, which revised all of the possible preventive strategies for infarction and which signalized that José Wilker had probably not done the cardiologic exams that were sufficiently capable to prevent the fatal outcome.

This line of thought results from the intuitive thinking process characterized by the dichotomy of causality. This common way of thinking takes shape in detriment of probabilistic, statistic and scientific reasoning.

While probabilistic reasoning infers that a preventive measure is able to reduce, to some degree, the probability of cardiac death, dichotomous reasoning interprets the world as a light switch, which we can switch on or off according to our actions. Unconsciously, our mind works in this manner: if the correct prevention had been done, Wilker wouldn't have died, while the cause of his death lies in some mistake within the chosen form of prevention. It is the search of a causal nexus for every marking fact, the search for a scapegoat. Finding a causal explanation for everything leaves us with a fake feeling of control, and brings us somewhat of a cognitive comfort.

However, if we think in a less Cartesian way, we will understand that the events in nature result from a multiplicity of causes, which interact with each other in a very complex manner. This makes it impossible to predict when and how a phenomenon will occur. We can only predict the probability that an event will happen. In other words, every José Wilker has a probability of cardiac death, which increases every year. And at the age of 66, even without too many risk factors, the probability remains in the intermediary level, around 10% in 10 years. Well, he might have casually been part of these 10%, even after doing everything correctly. Considering this, before finding a scapegoat, we must reflect on whether the occurrence was part of what had been predicted, a natural phenomenon.

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A good alternative to prevent cases like this would be going back to the previous century, when life expectancy did not exceed 40 years of age. At that time things were great, the life span was not long enough to suffer from sudden cardiac death. There was hardly a chance for sight to decrease or for teeth problems to occur. That was the ideal life. Now that we live much more, we must learn how to deal with certain events in a natural way. Here and there, despite the evolution of true preventive strategies (risk factors control), someone suddenly dies. Is it something weird or natural?

Then comes in another cognitive bias from our non-statistic mind: the over estimation of rare phenomena. Rare phenomena must be interpreted as exceptions, as a doing of chance, resulting from that 10% probability of having a coronary event in a 10-year period. The rarities should not orient the making of rules. However, we over estimate what is rare because uncommon things are more marking than common ones. What is common is trivialized, what is rare is over estimated, even if what is common is much more statistically important.

And here comes the best part. Considering José Wilker's death as an anomaly that should have been avoided, we must review our preventive strategies. Then, *Revista Isto*  $\acute{e}$  - loaded with the opinion of "specialists" - suggests that asymptomatic patients should do even more sensible exams, in order to diagnose occult diseases — a recommendation which endorses overdiagnosis, a distorted procedure intensely debated in this blog (posts: Santa Claus and George Bush).

José Wilker died from a heart problem because he lived until he was 66 years old. He was asymptomatic and knew how to manage his risk factors, doing what should be periodically done, and did not need to be submitted to the search for coronary disease. However, prevention does not mean total impediment to an undesired event. Wilker might not have had obstructive coronary disease and what actually happened was the instability of a previously insignificant, both anatomically and functionally, atheromatous plaque (nothing to do other than to control for risk factors). He might have had an obstructive plaque; however, as it is well known, procedures in this clinical context do not reduce mortality (there was nothing to do).

He might have been one of the rare exceptions of asymptomatic patients with extremely severe coronary disease, where the procedure of revascularization would reduce mortality. However, for every rare case as this one, there are so many other patients who are harmed by overdiagnosis, through excessive disease screening, resulting in a large number of unnecessary procedures, which can cause discomfort, sequels and even death. Overdiagnosis is defined as a correct diagnosis that, however, poses more potential malefactions than benefits. This is probabilistic reasoning.

Our non-statistic mind works with selective memory. We will never forget the exceptional day in which we found a case that actually benefited from screening. However, with our faithful mind, we forget about the asymptomatic patient who died under cardiac surgery or all of those who went through normal invasive exams or unnecessary revascularization procedures.

Observe how our cognition betrays us due to the sum of multiple biases: anti-statistic reasoning, tropism for causality, over estimation of rare events and our selective memory. How many mental traps!

By finding the humbleness to recognize our limitation in predicting and preventing phenomena in a deterministic manner, we approximate ourselves to a rational medical reasoning, increasing, therefore, the chance of obtaining the so called principles of non-maleficence and beneficence.