BroadcastMed | The High Cost of Cancer Drugs and What We Can do About it - Dr. Vincent Rajkumar

VINCENT RAJIKUMAR: Hi. I'm Vincent Rajkumar, hematologist and professor of medicine at the Mayo Clinic in Rochester, Minnesota. I'm here to talk about an article that we authored that appears in the current issue of the *MayoClinicProceedings.* The article covers the high cost of cancer drugs and what we can do about it. As you know, this cost of medical care is skyrocketing, and this is particularly true of cancer chemotherapy and new drugs to treat cancer.

What we covered in this article is the reasons underlying the high cost of cancer treatment and potential solutions, some of which are quite difficult to overcome this problem. So if you look at the causes why cancer treatment is just so expensive, sometimes $100,000 $200,000 a year, part of it has to do with the high cost of clinical cancer drug development. It costs a significant amount of money to do the preclinical studies, the phase 1 clinical trials to establish the dose, the phase 2 trial to establish efficacy, and the phase 3 trials to prove efficacy so that the drug is approved and it's commercially available.

But more importantly, there are other causes that drive the cost of cancer care. Some of these that we cover in this article include the fact that unlike most other medical conditions which are curable, cancer treatments are generally representing a monopoly. Let me explain this. When one is faced with a pneumonia, there are numerous antibiotics that are available to treat it. The use the one antibiotic and if the pneumonia is cured, means that you do not need to try the other antibiotics at all.

On the other hand, most cancers are not curable so that even if there are five drugs to treat a particular cancer, there is a monopoly because a patient will have to go through each of those drugs before one declares that the cancer is no longer treatable. In effect, that establishes each drug as something that is required for every patient as long as they're eligible, and each drug then represents a monopoly.

So the price controls that are available when you have multiple options don't exist in cancer. So even though it appears that there are multiple options for cancer, you really don't have many options for many of the cancers that we have that are not curable. Other reasons that drive up the cost of cancer care include the fact that there is really no generic price check.

For example, if there is a new drug to treat headache and it costs three times as much or 10 times as much as the old drug, one would continue to try and take the old drug to see if it works before switching to the new one. On the other hand, new cancer drugs often come with the promise of better survival or better response rates so that the old drugs are rapidly pushed out of vogue so you really don't have a true generic price check that can help control prices.

Other causes we argue are the seriousness of cancer which makes people willing to take and spend as much money as it takes to treat the condition. The fact that there is an incentive to give chemotherapy and to give more chemotherapy, and finally, the fact that even the generics for cancer are often highly priced.

So what can we do about it? There are many solutions we offer in this article. Most of these are going to be difficult to implement because they are hard decisions. But we need to consider them because at the rate at which the cost of cancer care is climbing, it would be unsustainable pretty soon.

One of the key options that we recommend is value-based reimbursement. Almost all Western countries have some form of price controls in place so that a drug cannot be priced at whatever price the market will bear. In the UK and in Canada, a drug is priced only based on how much value it provides.

So for example for one quality-adjusted, life-year increase, a drug can be priced perhaps $30,000, $40,000 per year, but in the US, there is no such price check. So that the same drug could be marketed for $100,000 a year or even $150,000 a year or in the case of a new drug, for PNH for example, even more than $200,000 a year. So some kind of value-based pricing needs to be adopted.

Another recommendation that we have is that a team of experts who have no conflict of interest be able to decide whenever a new drug is approved whether it's entering a monopoly situation. If they determine that it's something that represents a monopoly, we should have some price controls that is legally mandated. If that is not possible, at least a voluntary price control where the companies recognize that they are in a monopoly situation will be welcome.

Finally, other countries have adopted a system called compulsory licensing, which allows the government for lifesaving drugs to, after two years of the drug being on the market, allow a generic company to start manufacturing this lifesaving drug so that it can be affordable for most patients.

The objective of this article is not to criticize the pharmaceutical industry or criticize our health care system. The objective is to point out the hard choices ahead of us and to stimulate debate. If we are successful in stimulating debate and identifying ways in which we can solve this problem, that would be enough reward for us. Thank you.

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