## The Senior Citizen Times

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## WHY IS MY MEDICINE NOT WORKING?

Akshansh Chaudhary Senior Editor

Medicines are our lifeline. Our day starts and ends with taking medicines. One tablet for high blood pressure, another for diabetes, painkillers for arthritis, and the list continues. We senior citizens are too used to consuming so many medicines at once that sometimes we wonder whether these medicines are working or not. We do feel better at times, but there are several side effects that reveal themselves later.

The 80s were the best time for trusting the society. After the technology started driving humans, people started exploiting the trust of others. Recently, there has been a lot of outrage in which because people have complained about receiving fake medicines. The pharmaceutical companies have denied those claims, but there have been leaks that several big companies have exported low-quality medicines to developing countries of Africa. Insiders in the industry have told

The Senior Citizen Times that several grades of medicines are manufactured based on the country in which the medicines are sold. Low-income countries have a low barrier to entry, and pharma companies penetrate that and sell medicines which are not that high quality. Sources tell us that the medicines are not as effective as are the ones sold elsewhere in the world. The developed countries, on the other hand, have stricter rules, and hence they prevent the fake medicines to be sold in their country.

FAKE DRUGS PRESENT IN THE SYSTEM



Image Courtesy: The Guardian, Nigeria

The situation is grim. We used to think that medicines have the same standard irrespective of where you buy them. But to increase profit margins, pharma companies tend to sell low-quality medicines in these countries. It gets even worse. Since there is no way to track the origin of medicines, the pharma companies deny any claim regarding the sale of fake medicines. They just do not claim responsibility for the medicine, even if it has the same product label and other information.

New York, USA

Since we at The Senior Citizen Times care about our readers, we went deeper to understand the reason for the presence of these fake medicines. How do fake medicines penetrate in the system? Sources tell us that the primary source of the fake drugs is the rejected medicines which are discarded by the company. These rejected medicines get sold at a cheaper price in the market. Since the real discarded medicine has all the product details, local vendors reproduce the same batch multiple times and pack the medicine such that it looks the same. Since they are visibly similar, people buy these discounted medicines because not everyone can afford the medicines in the low-income countries.

This fake medicine then reaches the chemist and is stocked right next to the real medicine. Since they look identical, both the medicines are sold alongside each other. Gradually, as the "cheaper" vendor gives the better price of the medicine, the real medicine gets removed from the system and the fake drugs overtake the market. So, if your medicine is not curing you effectively, chances are that it is a fake. This is important because if you do not know whether the medicine you are consuming is real, you may end up getting sick, or worse. So, what is the solution? Is there a way to know whether the medicine we are consuming is coming from the right source?



Employees from Ivory Coast's health ministry raid a shop selling counterfeit drugs at the Adjame market in Abidjan earlier this year -Issouf Sanogo/AFP/Getty Images

## BLOCKCHAIN SOLVES THE PROBLEM OF FAKE DRUGS

Today's generation is trying to solve the problem through technology. They want to add a tag to every medicine (to the tablet level) such that anytime it is dispensed, you can just scan that tag to know the origin of that medicine. The technology for that is still being developed, but once it is developed, we would find it easier to trust the medicine we are consuming.

The technology behind this is called **Blockchain**. A blockchain is a technology which connects people and keeps a record of everything. In a layman language, a chain of those records is called blockchain. The basic idea behind blockchain is to create a global community in which there is complete transparency in the system. Everyone in the community knows what the other person is doing.

The way this would work is that everyone from the manufacturer of the medicine to its distributor would a part of this community. Now that everyone is a part of this community, whenever the company manufactures a medicine, it would simply add the medicine's information to this community. The distributor would receive the same information as they are also a part of this community, and so will the pharmacy. Whenever they dispense the medicine at the counter, the chain would automatically get updated and hence everyone in the community would know that the medicine has now been sold.

Because every medicine would be a part of this chain, when you buy it and want to test if it is real or fake, all you need to do is check whether the information of that medicine exists on that chain. If it does, then you have the real medicine which was manufactured by the company.

There is a solution, but the technology is not yet ready. One part of it is to make every person from the manufacturer to the distributor agree to join this community. Only when all the stakeholders join this community would everyone get informed about the transactions taking place around the world. This requires a major leap of trust in this community. In an exclusive interview with **The Senior Citizen Times**, the technologists working on blockchain talked about the existing state of this technology and how the trust would have a major role to play in the prospects to come.

Fake drugs are a problem and solutions like blockchain must be brought into practice as early as possible. So, inform your children and grandchildren to create applications for this community. Let the world progress with blockchain. ------