

Scrutinize the Pharmacological and Toxicological Innovations for Better Life

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The marketing Evolution of the Pharmaceutical Sectors has considerably increased over this fiscal year due to the pandemic and increase in need for solutions to put an end to what has been one of the economically worst hit years in the past 10 years.

The marketing evolution over this period has been boon for some pharmaceuticals and bane for others. Moderna has become one of the game changing Pharmaceutical companies who have used this pandemic year to the most effect by developing a vaccine with a efficacy of 91.4% and to be taken as a three interval shot to improve its efficacy. It is reported that it has administered nearly 32 million doses of Vaccines and is planning to improve the administration by 1 billion by the end of 2021.

Pfizer is one of the other major companies, who along with oxford university have developed a novel m-RNA based vaccine for the treatment of COVID-19 and was one of the first approved vaccines by WHO with an efficacy rate at 90%. It is also reported that the infection rate has considerably reduced to 65% in patients administered with this vaccine. With the complaints regarding the blood clot seems to not go away, the vaccine was proved to be effective and is administered considerably. They ended the financial year with a net profit of 41.9 million \$, compared to their previous year which was in the region of 41.1 million \$. It is reported that the increase in revenue might have to do with their swift production of Covid-19 Vaccine.

Johnson & Johnson is also another major player in the pharmaceutical sector, which has already developed a novel Covid-19 Vaccine for the treatment that has been used throughout the US. Not in terms of Vaccine, Other medicinal products have also provided its fair share of Improvement in increasing the revenue for this commercial giant. It is reported that based on the medicinal sales alone, they have generated a total revenue of 45 million\$ compared to that of their previous year's sales which was at 42 million\$.

The pandemic as well as the need for novel drugs have certainly improved the company's revenue over this financial year and it is projected that the value of the pharmaceutical sector will only increase over a period of time and will also constantly evolve during this period.

Moderna is a startup which was only founded in the year of 2010 and to achieve the level of revenue that they have improved over the period of time is a testament to their continuous hard work and the commitment that they have shown to the society.

Nutraceuticals:

Nutraceuticals is an improving domain in the pharmaceutical sector in which the product (drug) is derived from the food sources thereby adding additional health benefits to the ones consuming and also improving the nutritional values of the individuals who are using such products. These products that are derived from the nutraceutical domain help in maintaining a healthy human system, controlling any symptoms from diseases that may have arisen before and also prevent the system from having any malignant processes in the system.

- Dietary Supplements
- Functional Foods
- Medicinal Food
- Farmaceuticals
- Health Benefits of Nutraceuticals

Pharmacology:

Pharmacology is a major study that comes under the domain of pharmaceutical sciences which intends to study the action of the drug which enters the system. Pharmacology defines the interaction between the chemicals and the human system and how it influences treating the disease. The pharmacological studies help in understanding the optimal level of drug composition needed to treat disease and the way the drug needs to be designed so it may be enough to treat the complexion within the system. This is the major step that is to be followed before the production of the drugs on a larger scale.

- Pharmacokinetics
- Pharmacodynamics
- Drug Discovery and Clinical Practice
- Molecular Diagnostics
- Chemical Biology and Antipathogenic Capabilities

Received: February 14, 2022; **Accepted:** February 22, 2022; **Published:** February 28, 2022