THE MORAL IMPERATIVE AND PRICING PRESSURES: SHAPING THE PUBLIC PERCEPTION OF THE PHARMACEUTICAL INDUSTRY

Abstract Author

The growth of the pharmaceutical industry is mostly based on the perception of the public about the industry and also depends on the attitude of the people towards the Pharmaceutical Industry. Building and maintaining a positive attitude of the public towards the pharmaceutical will help to continually guarantee the healthy growth of the industry. The negative thoughts in people when it comes to the pharmaceutical industry have been caused by certain dangerous drugs like thalidomide and many other drugs that cause serious side effects when they are not properly used. Education of the people is a great need as it will help to supply the public with enough information to help them know about the medication that they take and guide them to use drugs properly in a way that will protect them from side effects. Dug food interactions is one of the big problems that is affecting the effect of the drugs and teaching the public about the safe foods they should eat while taking medication will help to alleviate side effects and at the same time lower the costs in the industry that can be caused by the increase of side effects in patients. When the patients have good positive attitude towards the drugs being supplied by the pharmaceutical industry, they will happily accept the drugs and fully experience the effects of the medication. Maintaining a good relationship between the patients and the pharmacist and doctors will help to increase the health of the patients while also increasing the growth of the industry.

Keywords: Public, health, attitude, drugs, pricing, relationship, interactions, acceptance.

Clemence Bernard Mtunze Glocal University Pharmacy College Saharanpur, India clemencebernard5199@gmail.com

I. PUBLIC PERCEPTION OF THE INDUSTRY

The rise of the pharmaceutical has been something that has been well noticed by everyone in this world and it has led to the development of public health and also helped to eradicate a number of infectious and communicable diseases in this world. From the introduction of the discoveries of the die formulations to the discoveries of the synthetic drugs and till today the pharmaceutical industry has continued to have positive advancement that has benefited mankind in numerous ways [1].

The progress in the pharmaceutical industry has brought so many positive benefits yet at the same time has given rise to many problems like drug abuse and increase the need of education regarding the use of medicines and protection of the general public from the same drugs. Since the 19th century, the Era of isolation and purification of so many chemical compounds, the industry has grown big facing so much opposition that mainly come from the public and this includes the question of whether the pharmaceutical industry has the loved of the health of the public as the fundamental impetus for it to work hard or it is the acquisition of money that motivates it to work hard. This question is seen mostly in different parts of the world, different societies and religious groups, due to this question we see that some groups of the people are not experiencing the full benefits that the pharmaceutical industry is offering [2].

There is need to create awareness of the morality of the pharmaceutical industry and let people know and understand that the love of the health of the public is the foundation of the industry, this is the key to the healthy growth of the pharmaceutical industry. The industry is facing a number of problems and one of them is the pricing pressure. Since the industry is mainly focused on the health of the general public of which that is the basic need of every person. Now the question arises whether charging large prices for medicines is morality right or wrong, many people do not understand the pricing of the pharmaceutical products and as a result it becomes difficult for them to understand why there are pharmaceutical products with high prices. This pressure affect the industry as it needs to make sure the prices charged will not cause any losses and also still keeping in mind that charging high prices will be something to be under attack by the public because health is a basic need that everyone should afford without difficulty. The pressure arises when the pharmaceutical companies are faced with the fact that there is need to charge prices that allow for the return of a good profit yet at the same time not negatively attacking the sentiments of the public who sees the drugs as something that should be given to them for free [3].

This big pressure is something that need to be dealt with by the use if education of the public about the process that the drugs go through from the discoveries stages till their entry into the market .Without this understand, this question of right and wrong will negatively affect the growth of the pharmaceutical industry and also lead to the decline of the profits in pharmacies around the world and also leading to rise in deaths as the individuals continue to see the pharmaceutical industry as a group of people who are after people's money and not after the health of the public. There is need to see that the public understands and appreciate the pricing of the pharmaceutical products, this will lead to rise in the sells of the pharmaceutical products and also at the same time positively improving the health of people as many individuals will now gladly buy the pharmaceutical products without any doubt of the negative motives behind the production of the drugs. Education of the public not only

about the benefits of the pharmaceutical products but also about the reason behind what many considers not good about the pharmaceutical industry is a very essential thing to do to ensure the success of the industry. When people understand the industry including how it works then they will easily accept the products that they take into their bodies without any subconscious rejection that lead to the ineffectiveness of many pharmaceutical products. When the attitude of the public towards the pharmaceutical Industry improves positively then there will be a mutual benefit between the industry and those been served by the industry because according to the development of the knowledge of the mind we now understand that the mind has the power to reject the power of the drugs rendering it effective in the body of the individual, their for positive attitude and understanding of the good of the pharmaceutical products is necessary for the continual growth of the industry [4].

II. DANGEROUS DRUGS THALIDOMIDE

The fear for the side effects of drugs has been a big subject of concern that need to be dealt with to allow for the success of the industry, drugs like thalidomide affected many pregnant women in 1950s and resulted in at least 10000 innocent children being born with deformities and also caused a lot of miscarriages has left a negative thought about drugs in people's minds. The fear of such situations has led to severe caution being taken by the pregnant women and one of understanding includes having a hatred for drugs that are considered safe for them. The only thing that now keeps the sales of the drugs high is the good relationship between the pharmacist, doctors and the patients. Without this good relationship that helps to build trust and assure the patient of the safety of the drugs, the sales of the products of the pharmaceutical industry would be affected negatively [5].

Education of the public regarding the safe use of the drugs and also about the potential harm of the drugs is very important as it gives the patient full responsibility of choosing whether to accept the medication or not. Many patients take drugs from the pharmacies but end up not completing all the medications as recommended on the prescription because of the lack of information that is in many patients. Good relationship between the pharmacist, doctors and patients needs to be improved and maintained to ensure safe use and acceptance of drugs by patients. When patients collect medication while they subconsciously reject the power of the drugs. We have now come to the understanding that the mind has the power to suppress the potency of the drugs if it negatively accept them as wrong for the body. Education and supply of information about drugs will mentally prepare the patients to be ready and to expect the positive effect of the drugs without inner rejection

Good counseling and supply of the negative and positive information about drugs helps to remove the subconscious rejection of drugs that many patients have leading to the in effectiveness of the medication. This might seem like a very small issue in the pharmaceutical industry but it is a very big problem because unless the patients are mentally ready to accept the power of the drugs then the growth of the industry will be stunted. So many drugs have been known to cause serious negative side effects and this knowledge is deep in people's minds and this has caused a development of the subconscious rejection of drugs causing many drugs to be in effective in patients [6].

III.SIDE EFFECTS OF DRUGS

The problem of the side effects of drugs is of great concern as it is causing a lot of challenges in both patients and the industry. The big loss faced by the industry as a result of side effects comes from trying to fix the negative effects caused by drugs and this is mostly caused by the lack of information in patients on how to use the drugs properly. Good education of the public regarding the use of certain specific drugs will definitely help to minimize the losses that the industry is facing when it comes to dealing with the side effects of drugs. OTC drugs are the one that are of easy access to the public and this rises a great alert of the need to educate the public about the side effects of different types of drugs because if there is no proper education that help the public to be cautious of the wrong use of the drugs then the cost of solving the problems comes on the pharmaceutical industry leading to greater losses and attack of the industry [7].

Pain killers such at acetaminophen and steroidal anti-inflammatory drugs (NSAIDS) like ibuprofen and Naproxen are drugs used to reduce fever and pain in the body yet large doses of these drugs may cause liver failure. To those patients who drink alcohol, these drugs can be serious problems when taken in large doses, especially NSAIDS which can cause gastric ulcers, kidney damage, high blood pressure and bleeding in the stomach etc. Many patients have wrong information regarding the use of drugs for example the thought that when pain killers are taken in large amounts then the pain will alleviate immediately, this is a problem as it causes the same problem that has been listed up regarding the side effects of pain killers. Proper knowledge of the use of the drugs will help build trust between the industry and those been served by the industry. Also, the supply of information will mutually lower the cost and expenses of both the industry and the patient and also lead to improvement of public health and growth of the industry [8].

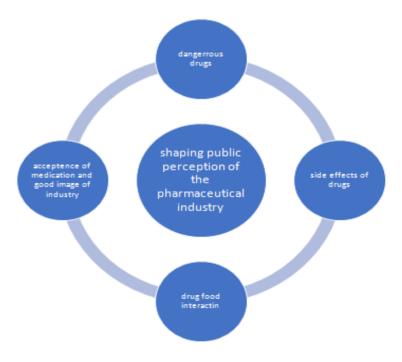


Figure 1: Shaping Public Perception of the Pharmaceutical Industry

IV. DRUG FOOD INTERACTIONS

Food is one of the most important things that affect the effect of the drugs but many of the patients have no idea about serious problems caused by food and as result there is reduction in the positive effects of drugs patients. Food and Drugs interactions can be positive that is of benefit to the patient or it can be negative that is it causes unwanted effects in the body of the patient. There are so many drugs that need to be taken before eating food, drugs that need to be taken after eating food and some foods that shouldn't be eaten at the same time while taking certain type of medication. This kind of information is very important, it should be taught to both patients and all those who are taking medication because it helps to increase the effect of the drugs and at the same time reduce the costs that come as a result of the ineffectiveness drugs caused by the drug food interactions [9].

When a patient take the food that reduce the effect of the drugs it is not a cost to the patient only but also to the pharmaceutical industry because this leads to generation of new problems that need to be solved ,for example effects of side effects caused by the accumulation of drugs in the body as a result of certain food taken at the same time with drugs .Eating oat bran can decrease the absorption of certain medication their for it should be avoided all the time when taking drugs that need quick or good absorption for their full potential to be experienced [10].

Grapefruit is a very delicious juice but it should be avoided by a patient taking medication because it tends to increase the level of certain medication in the blood and this can result in serious side effects that become a cost to both the patient and the pharmaceutical industry. Statins are meant to reduce the level of cholesterol in the body but drinking grapefruit juice increases the level of these statins in the blood which result in serious side effects.

So before taking grapefruit juice or any kind of juice the patient must consult the pharmacist or the doctor to get proper knowledge on the possible dangers that can be caused by the food. The other medication that is affected by grapefruit juice is calcium channel blockers, it's interaction with grapefruit juice increases the level of medication in the body. If the patient is taking any of the medication listed below, he or she needs to consider consulting the doctor or pharmacist before including grapefruit juice into their diet so that they can always be safe from any side effects.

- Lercanidipine
- Nifedipine
- Nimodipine
- Verapamil
- Amlodipine

Some Daily foods that people eat that affect the drugs includes the dairy products like milk, cheese and yogurt. These dairy products can cause the reduction of the absorption of antibiotics and leads to reduction of the effects of the antibiotics, there for, patients should either avoid eating these foods while taking antibiotics or eat 2 to 3 hours before taking medication to avoid the effects of the interactions. The knowledge of the drug food

interactions will help to increase the effect of the drugs and also reduce the costs that are caused by the drug food interactions. Green vegetables that contain high amounts of vitamin k can decrease thinning of aspirin in the body and also alcohol can affect insulin and diabetic pills. There is great need to educate the public on the effects of food on the drugs that they take so that Patients will take care of the type of food that they eat while taking medication [10].

This knowledge will be of great use to ensure there is maximum effect of medication in patients and at the same time reducing costs that are caused by food drug interactions and also help in the growth of the pharmaceutical industry. To ensure the reduction of the negative effects caused by drug food interactions education of the public is of great importance as it will help patients to manage their diet very well and adopt only to that diet which support the maximum positive effect of their drugs. This will help to ensure continual growth of the industry and improve the health of the public.

V. ACCEPTANCE OF THE MEDICATION AND COUNSELING

Proper counseling of the patients in hospitals and pharmacies is of great importance as it increases the knowledge about drugs and help to alleviate the problems that are caused by the wrong use of medication. When the public is educated not only about the uses of drugs but also about the causes of side effects and drug food interactions, there will be greater level of acceptance of the medication which will result in the positive increase of the effects of medication in patients. It is not only useful to teach the patients on how to take medication but also about the effects of the wrong use of drugs. Posters related to food drug interactions should be found in public places so as to increase awareness of the importance of safe use of medication. This will be of enormous benefit to both the patients and the pharmaceutical industry because it will reduce the mini costs that are being faced by the industry [11].

The health of the public will be continuously increased when people understand the importance of right use of medication and the side effects of the wrong use of drugs. Supply of the right information about the drugs will mentally prepare the public to accept the medication and as a result, the full effects of the medication is experienced. Awareness of the serious side effects that can arise due to the food drug interactions and the side effects of the medications is of great importance as it help both the patients and the pharmaceutical industry and support the continual growth of the industry without criticism [11].

The pharmaceutical industry is a fast continually growing industry that has changed the lives of many people around the world, it very important that as the industry grows the public is also mentally prepared to accept the drugs with a positive attitude so a to ensure proper use of medication and assure full effect of the drugs in patients. The rejection of medication due to lack of proper knowledge results in people misusing the drugs and this is a source of numerous costs that affect both the patients and the pharmaceutical industry.

OTC drugs are freely available to the public hence are more prone to abuse as compared to prescription drugs this means there is need to properly educate and counsel the patient on the safe use of medication so as to avoid side effects caused by these OTC medications. Any food that can interact with the drugs should be discussed about it during

the period of counseling so that the patients will have the results they desire after taking medication.

VI. GOOD IMAGE OF THE INDUSTRY

The image of the pharmaceutical industry is of great importance to the public as it helps to alleviate the hatred for medication by those who do not trust the impetus behind the hard work of the pharmaceutical industry. There is need to work together with people, teach the good news that the pharmaceutical Industry has for the people around the world and by so doing patients are well convinced that when they take drugs from the pharmacy store it is in the interest of the pharmacist and the doctors that the health of patient is improved.

Love for good health should be what is marketed mostly so that the people understand that the pharmaceutical industry is there as part of their lives to promote good health throughout the rest of the days. A good relationship between the industry and the public will ensure continual growth of the industry and also help to improve the health of each and every person around the world [12].

VII. CONCLUSION

The growth of the pharmaceutical industry is influenced by public perception and attitude towards the industry. Negative perceptions are often linked to dangerous drugs and serious side effects resulting from improper usage. Educating the public about medications and proper drug-food interactions is crucial for ensuring the safe and effective use of drugs. The pricing of pharmaceutical products also affects public perception, and transparency and understanding of the reasons behind pricing can help build trust between the industry and consumers. Building a positive relationship between patients, pharmacists, and doctors is essential for increasing the health of patients and fostering industry growth. Proper counseling and education about drugs can alleviate subconscious rejection of medication, leading to better patient acceptance and improved medication effectiveness. Awareness of drug-food interactions can also minimize negative effects and reduce costs for both patients and the pharmaceutical industry. Maintaining a good image of the industry through promoting its dedication to public health will contribute to its continued success and benefit global health.

REFERENCES

- [1] Ekor, Martins. "The growing use of herbal medicines: issues relating to adverse reactions and challenges in monitoring safety." Frontiers in pharmacology vol. 4 177. 10 Jan. 2014, doi:10.3389/fphar.2013.00177
- [2] McLellan, A Thomas. "Substance Misuse and Substance use Disorders: Why do they Matter in Healthcare?." Transactions of the American Clinical and Climatological Association vol. 128 (2017): 112-130
- [3] Shmmon Ahmad Abdul Hafeez Ashok Kumar: Importance of data integrity & its regulation in pharmaceutical industry. The Pharma Innovation Journal 2019; 8(1): 306-313(UGC referred Journal 2018).
- [4] Abdul Hafeez, Shmmon Ahmad, Anjoo Kamboj, Mumtaz Ahmad, Anmar AL-TAIE, Sameera Ali Siddiqui and Isha Talwar. Industrial hazards and safety management in pharmaceutical industry. International Journal of Applied Research. 2020; 6(5): 01-07.
- [5] Kim JH, Scialli AR. Thalidomide: the tragedy of birth defects and the effective treatment of disease. Toxicol Sci. 2011 Jul;122(1):1-6. doi: 10.1093/toxsci/kfr088. Epub 2011 Apr 19. Erratum in: Toxicol Sci. 2012 Feb;125(2):613. PMID: 21507989.

- [6] Jimmy, Beena, and Jimmy Jose. "Patient medication adherence: measures in daily practice." Oman medical journal vol. 26,3 (2011): 155-9. doi:10.5001/omj.2011.38
- [7] Tariq RA, Vashisht R, Sinha A, et al. Medication Dispensing Errors and Prevention. [Updated 2023 May 2]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK519065/
- [8] Bindu, Samik et al. "Non-steroidal anti-inflammatory drugs (NSAIDs) and organ damage: A current perspective." Biochemical pharmacology vol. 180 (2020): 114147. doi:10.1016/j.bcp.2020.114147
- [9] Bushra, Rabia et al. "Food-drug interactions." Oman medical journal vol. 26,2 (2011): 77-83. doi:10.5001/omj.2011.21
- [10] Rozenberg, Serge et al. "Effects of Dairy Products Consumption on Health: Benefits and Beliefs--A Commentary from the Belgian Bone Club and the European Society for Clinical and Economic Aspects of Osteoporosis, Osteoarthritis and Musculoskeletal Diseases." Calcified tissue international vol. 98,1 (2016): 1-17. doi:10.1007/s00223-015-0062-x
- [11] [Tariq RA, Vashisht R, Sinha A, et al. Medication Dispensing Errors and Prevention. [Updated 2023 May 2]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK519065/
- [12] Moynihan, Ray et al. "Selling sickness: the pharmaceutical industry and disease mongering." BMJ (Clinical research ed.) vol. 324,7342 (2002): 886-91. doi:10.1136/bmj.324.7342.886