

Study the Impact of Quality: An Analysis in the Perspective of the Pharmaceutical Sector of Bangladesh

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Abstract

The idea of quality is old in the world. When a buyer buys a product from any marketplace, he/she first doubts that is it in proper quality or not? Every buyer's target is to receive the quality product but in many cases they are cheated. A general idea is, when the production has been started for sale the idea of quality as well grown in mind of the buyer. But a complete knowledge on quality has not been developed over a night. It takes a long time. Buyers are becoming aware about the quality. So to survive in the world business the producers have to gather the knowledge on quality and have to apply in its production and business purpose. The pharmaceutical sector produces the human life saving products. This is because the question of quality ultimately comes first in the inner mind of a customer. A fake or substandard drug is harmful and in many cases dangerous for human health. The pharmaceutical sector of Bangladesh not only produces and supplies the medicines in domestic market but also exports in first world developed markets and has stood as an important foreign currency earning sector. This study attempts to understand quality the situation of our fast growing pharmaceutical sector and its impact on production and exports.

Keywords: *Pharmaceutical, History, Quality, Undoubtedly, Production, Standardization, Improving, Aware, Survive, Business, Businessman, Apply, Unsuccessful*

Introduction

The history of quality control is undoubtedly as old as industry itself. A general idea is, when the production has been started for sale the idea of quality as well grown in mind of the buyer. But a complete knowledge on quality has not been developed over a night. It takes a long time to form the today's quality standardization situation. This quality standardization situation is not hundred percent acceptable to all people of the world, because the concept of standardization is improving in every moment. On the other hand the buyers are becoming aware about the quality. So to survive in the world competitive business every producer or

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businessman has to gather the knowledge on quality and has to apply in its business purpose, otherwise he will be unsuccessful and loses. Accordingly the concept of quality is an important phenomenon in the world production and business.

Objectives

The producers produce a good and service and the buyers purchase and use it. In general a producer produces a good and service for making profit. Cost, market price and profit margin are closely related to each other. Producers like to sale at a highest price so that it earn highest profit and on the other hand the buyers like to buy a quality good and service at a lower price. In this situation the objective of this study is to analyze the world quality position and the position of this in Bangladesh especially in the pharmaceutical sector of this country.

Methodology

The role of maintaining quality in every purpose in Bangladesh is definitely a great mater as like other country. As a purchaser we all would always expect a quality product from the producers but it did not always happen. Because the comparatively cheaper one had been accepted by the buyers in many cases and so for the market competition the producers could not produce a product at a higher price. Here to study the quality position of the products of our pharmaceutical sector will be analyzed on the documents published in various newspaper, magazines, souvenirs, journals etc.

Literature Review

In 1924, W.A. Shewhart of Bell Telephone laboratories developed a statistical chart for the control of product variables. This chart was considered to be the beginning of statistical quality control. Later in the same decade, H. F. Dodge and H.G. Roming, both of Bell Telephone Laboratories, developed an area of acceptance for the quality of a product. In 1946, the American Society for Quality Control was formed. Recently, the name had been changed to American Society for Quality Control (ASQ). This organization, through its publications, conferences, and training sessions, would like to promote the use of quality for all types of production and service. In 1950, W. Edwards Deming, learned statistical quality control from Shewhart, and gave a series of lectures on statistical methods on quality and quality responsibility to Japanese engineers and the CEOs of the largest organizations in Japan. Joseph M. Juran made his fast trip to Japan in 1954 and further emphasized management's responsibility to achieve quality. Using these concepts the Japanese set the quality standards for the rest of the world to follow. In 1960, the first quality control circles were formed for the purpose of quality improvement. Simple statistical techniques were learned and applied by Japanese workers. This technique made the miracle development of the industrial sector of Japan. By the late 1970s and early 1980s, U.S. managers were making frequent trips to Japan to learn about the Japanese miracle. In the late 1980s the automotive industry began to emphasize statistical progress control (SPC). Suppliers and their suppliers

were required to use these techniques. The Malcolm Baldrige National Quality Award was established and became the means to measure TQM. Genechi Taguchi introduced his concepts of parameter and tolerance design and brought about a resurgence of design of experiments (DOE) as a valuable quality improvement tool. Emphasis on quality continued in the auto industry in the 1990s when the Saturn automobile ranked first in customer satisfaction (1996). In addition, ISO – 9000 became the worldwide model for a quality system. The automotive industry modified ISO 9000 to place greater emphasis on customer satisfaction and added elements on production part approval process, continuous improvement and manufacturing capabilities. ISO 1400 was approved as the worldwide model for environmental management systems.

Defining Quality

When the expression “quality” is used, we usually think in terms of an excellent product or service that fulfills or exceeds our expectations. These expectations are based on the intended use and the selling price. For example, a customer expects a different performance from a steel washer than from a chrome-plated steel washer because they are a different grade. When a product surpasses our expectations, we consider that quality. Thus, it is somewhat of an intangible based on perception. Quality can be quantified as follow:

$$Q = P/E$$

Where,

Q = quality

P = performance

E = expectations

If Q is greater than one ($Q > 1$), then the customer has a good feeling about the product or service. Of course, the determination of P and E will most likely be based on perception with the organization determination performance and the customer determination expectations.

To survive and thrive in today’s cut-throat business world, every producer is required to implement some quality management program that delivers an edge in productivity, profitability and efficiency. To survive and remain competitive in global market, goods/services offered should not only be of high quality, but also be reliable, safe, energy-efficient, environment friendly and cost-effective. Ability to produce quality goods and services and to sustain them over a long period of time requires implementation of quality standards or systems.

Core Value and Concepts of Quality

Quality is judged by customers. Value and satisfaction may be influenced by many factors throughout the customer’s overall purchase, ownership, and service experiences. These factors include the organization’s relation with customers that helps in building trust, confidence, and loyalty. This concept of quality includes not only the product and service

characteristics that meet basic customer requirements, but it also includes those features and characteristics that differentiate them from competing offerings.

Achieving the highest levels of performance requires a well executed approach to continuous improvement and learning. The term continuous improvement refers to both incremental and breakthrough improvement. Learning refers to adaptation to change leading to new goals or approaches. Improvement and learning needs to be embedded in the way of the organization functions. Embodied means improvement and learning that helps to eliminate problems at their source.

An organization success depends increasingly upon the skills and motivation of its work force. Employee success depends increasingly upon having opportunities to learn and to practice new skills. Organizations need to invest in the development of the work force through education, training, and opportunities for continuing growth. Such opportunities might include classroom and on-the-job training, job rotation, and pay for demonstrated knowledge and skills. On-the-job training offers a cost-effective way to train and to better link training to work process. Work force education and training programs may need to use advanced technologies such as satellite broadcasts and computer-aided learning. Increasingly, training, development, and work units need to be tailored to a more diverse work force and to more flexible, high-performance work practices.

A major success factor in competition is the design-to-introduction (production generation) cycle time. Meeting the demands of rapidly changing markets requires that organizations carry out stage-to-stage integration of activities from basic research to commercialization. Increasingly, design quality also depends upon the ability to use information from diverse sources and databases that combine customer preference, competitive offerings, price, marketplace changes, and external research findings. Emphasis should also be placed on capturing learning from other design projects.

Total Quality Management (TQM)

Total Quality Management (TQM) is a management strategy aimed at embedding awareness of quality in all organizational processes. TQM has been widely used in manufacturing, education, government, and service industries, as well as NASA space and science programs. Total Quality provides an umbrella under which everyone in the organization can endeavor and create customer satisfaction at continually lower real costs.

Introduction of ISO

The International Organization for Standardization (ISO) was founded in 1946 in Geneva, Switzerland, where it is still based. Its mandate is to promote the development of international standards to facilitate the exchange of goods and services worldwide. ISO is composed of more than 90 member countries. The United States representative is the American National Standards Institute (ANSI).

The ISO Technical Committee (TC) developed a series of five international standards for quality systems, which were first published in 1987. The standards (ISO 9000, 9001, 9002, 9003, and 9004) were intended to be advisory and were developed for use in two-party contractual situations and internal auditing.

Defect Prevention Techniques of ISO 9000

In order to prevent the defects in any product or service, the most effective technique is the quality control based on zero defect program or attempt to acquire ISO 9000 certification. This technique is also advocated by ISO 9000 and as per ISO 9000. Quality control involves operational techniques and activities aimed at monitoring a process and at eliminating causes of unsatisfactory performance at relevant stages of quality loop in order to earn the result in defect less production. The production of defect free products or service can be obtained through zero defect program or acquiring ISO 9000 certification. Total Quality Management (TQM) is implemented through acquiring ISO certification because the ISO standards are commercially important for export thrust.

Quality Certification

It is a tool for development or building the structure of quality. In developing countries, the recognition of standardization in its own right is generally slow. The certification system has a lot of commercial advantages which can lead the country's business into a widening acceptance. When compliance with standards is backed by certification, the output (product/service) will be more easily sold in both domestic and world markets. So certification is an effective tool to introduce and maintain quality control and thus ensure success of industrial enterprises.

Purchasers/Suppliers often need assurance that the products/services provided conforms to an international standard or to specified standard. In many cases, this situation may lead to repeated audits (second party audits) on the specified products or services. The certification is intended to reduce the number of such assessments. The responsibility lies with the supplier to demonstrate the competence of the management and this would provide confidence to the purchaser. Depending on the nature of the product or service, purchaser may need to assure themselves that the supplier has got the capability to provide a specific product or service. The purchaser can always request a second party audit as a part of contract, even if the organization holds an ISO compliance certificate.

The following purposes are served by the certification:

- (a) Demonstrate compliance with international quality standard.
- (b) Demonstrate that the company has a commitment to quality.

Quality system's certification provides number of benefits to customers and manufacturers. Adoption of quality system demonstrates that a company has implemented adequate quality system in its manufacturing process. It is valuable to the supplier as well as purchaser to provide evidence of operation of an effective quality system that has been approved by an independent quality agency (third party audits). This provides an increased confidence in the quality of products. From Nation's viewpoint, the certification of quality system will result in improvements in the quality capability of a large section of commercial and industrial organizations.

Quality Concept of Our Country

Now if we consider the concept of quality in perspective of our country, we get a general observation. In general, our record on quality is poor, not only poor rather very poor in all fronts of business and life. Each of us faces such examples of poor quality in day to day life. The fact is that over a period of last years, we have got used to poor quality of goods or items. This process might have started with our low or poor purchasing power which made it necessary to compromise and produce goods which cannot pass quality tests. In this war between price and quality, price always emerged as the winner.

Owing to above circumstances, the suppliers started compromising more than necessary on quality, thus the product quality drops because of price pressure. This sometimes gives boost to industrial profits. Today, we have a situation in many industries, wherein there is mass of low priced and low quality items with false warranties. Thus, genuine quality products have become fancy and so are available at premium price. This premium, in most cases is far in excess of the cost of delivering that quality. Almost all products have an original and duplicate brand available openly. And yet many customers buy duplicate ones, mainly because the customers do not perceive value for money in original goods. Further, the duplicate items are cheap and carry a fake guarantee to attract the customer.

The supplier says, I cannot give better quality because the user does not pay and the user says that the product quality will be poor whatever may be the price, so why should I pay more.

The reality is that good quality can come or can be introduced, if venders are willing to invest in building quality and user demands it. Both the user and supplier have a major responsibility in ensuring the up-gradation of product quality. The moment, the user demands good quality product, supplier will automatically improve the things. The user has to be educated himself on quality front. Now a discussion on the quality situation of our pharmaceutical sector is analyzed below.

Negative Reputations on Quality of our Pharmaceutical Sector

There are some negative reputations on the quality of our pharmaceutical production and these are some of the pharmaceutical companies are producing low standard, counterfeit, duplicate and spurious drug. Our pharmaceutical sector is seriously being affected by this negative reputation. The various published news and reports were:

11 patients died by taking low standard antibiotic medicine named Sinfu, in year 2007. 13 babies died, in 2005, for nutritious less and the cause of their death was nutritious less milk powder.

In 2006, a national news paper published news and that was, “The business of spurious drugs were going on rampant within the country. A team of the City detective police captured a huge amount of spurious and over expire dated drugs from Mitforded and Babubazar drugs market of Old Dhaka in February, 2007.

A team of Joint tusk force arrested five persons with entrepreneur of a non-approved pharmaceutical company named Millennium Pharmaceutical. In producing drugs this

pharmaceutical the workers were not using any ingredients. They were using only Atta, Mayday, Bason, Arrowroot, Starch and Lactose in manufacturing drugs.

The news also had, "Our life will go in danger, if we take duplicate, counterfeit, spurious and low standard drugs in lieu of standard drugs. By taking over expire dated and low standard drugs, a patient may either goes to die or becomes physically disordered or disabled. But unfortunately, the issues of death and physical disorder ness for taking over expire dated and low standard drugs were never monitoring in this country.

A report¹ on dated seven June, 2007 published that, "A mobile court had arrested some corrupted persons from Fullar Street of Dhaka, from a drug producing company named ARA Enterprise at the time of manufacturing Oral-Saline. They were manufacturing Oral-Saline by using insufficient ingredients and in insufficient quantity. The packets of saline were printed that saline is produced with 1.8 gm sodium chloride, 8 gm glucose anhydrous and more two components. But they were producing Oral-Saline by using 10 kg glucose anhydrous and 10 kg sodium chloride."

According to the formula of WHO each packet of Oral-Saline should have 1.75gm Sodium chloride, 0.75gm Potassium Chloride, 1.45gm Tri-Sodium Citrate Dehydrate and 10 gm Anhydrous Dextrose. A diarrhea patient may goes to die by taking/drinking this type of spurious and duplicate saline for being deficiencies of electrolyte in the body. What should be the punishment of these corrupted people, if a baby is died by taking such type of spurious saline? One packet oral saline of our Social Marketing Company Ltd. has 1.30gm Sodium chloride, 0.75gm Potassium Chloride, 1.45gm Tri-Sodium Citrate Dehydrate and 6.75 gm Anhydrous Dextrose.

The Directorate of Drug Administration (DDA) is the legal authority in Bangladesh for controlling the duplicate, spurious, harmful and low standard drugs. It should found out and punished the corrupted persons related in producing duplicate, spurious, harmful and low standard drugs. But this institution in Bangladesh does not able to show any remarkable example in this perspective. Because of it is, there is a lack of morality and responsibility among the persons of DDA from top to bottom. Moreover from top to bottom none was taken on the harbor for neglecting his duty. But there is a strict law of punishment for such type of offence. So always the offenders are remaining outside the punishment and the mankind, society and finally the country is suffering.

Positive Reputations on the Quality Situation of our Pharmaceutical Sector

In general the producers of our pharmaceutical sector produce the quality drugs and export above the eighty five countries of the world. The owners of the newspaper not only published the negative news on our pharmaceutical sector. They also published the positive news and try to create the positive image in the pharmaceutical sector of our country. The published positive news on Bangladeshi pharmaceutical companies and drugs were as follows:

¹ *The Daily Prothom Alo*, Dated 07.06.2007

1. Bangladeshi pharmaceutical companies; Incepta Pharmaceutical Ltd., Beximco Pharmaceutical Ltd., Square Pharmaceutical Ltd., Eskayef Pharmaceutical Ltd., and other some pharmaceutical companies have earned the GMP compliance (Good Manufacturing Practice) certificate of European Union. Eskayef Bangladesh Ltd. has earned the UKHMRA (world quality management organization for certification of GMP compliance of a manufacturer) certificate in producing drugs. By earning this certificate, a new door has opened for exporting drugs to the market of E.U. Now Bangladesh can export drugs to the market of E.U. The Chief Executive of the company (Incepta Pharmaceutical Ltd.) expected that it is possible to earn 1000 crore taka in a year by exporting drugs to the E.U. market. Even the MNC (Novarties) has been exporting drugs to Europe from few years ago. The other two companies (Square Pharmaceutical Ltd. and Beximco Pharmaceutical Ltd.) have been exporting their producing drugs to England from a few years ago.²

1. The Popular Pharmaceutical Company, SQUARE Pharmaceutical Ltd. and Incepta Pharmaceutical Ltd. are producing insulin for the diabetes patents. This is a high technology based drug. A few pharmaceutical companies in the world produce insulin. It is hopeful news for the diabetes patents of Bangladesh.

Some other companies like Square Pharmaceutical Ltd. and Beximco Pharmaceutical Ltd. are producing quality inhaler. This is another high technology based drug. This proves that the pharmaceutical companies, in Bangladesh, are now able to produce both the low technology based and high technology based quality drugs.³

2. A team of high positioned officers of Methodist Healthcare of USA came in Bangladesh in 2007, to visit the factory of Square Pharmaceutical Ltd. In the team there was the chief executive officer, Gurry Shorob, and chief operating officer, Can Oelton. In that team there was also the chief executive officer Dr. Nasir Huq. of Zarman Town International Medicine.

They visited the manufacturing procedure and strict quality controlling system of many drugs with cephalosporin. They pleased to see/visit such type of world standard drug manufacturing company in Bangladesh.⁴

3. In the international market, the export of Bangladeshi drugs is increasing day by day only for its high standard quality. Only in 2010, the amount of export of drug increased Tk.3274.32 million.⁵

Therefore from the above published news, opinion, comments, now it is obviously true that the pharmaceutical products of Bangladesh is high standard. The pharmaceutical companies which have earned ISO certificate are producing/manufacturing the quality drugs/medicines.

² *The daily Ittefaq* Dated 01.03.2008

³ *The daily Naya Diganta* dated 16.06.2007

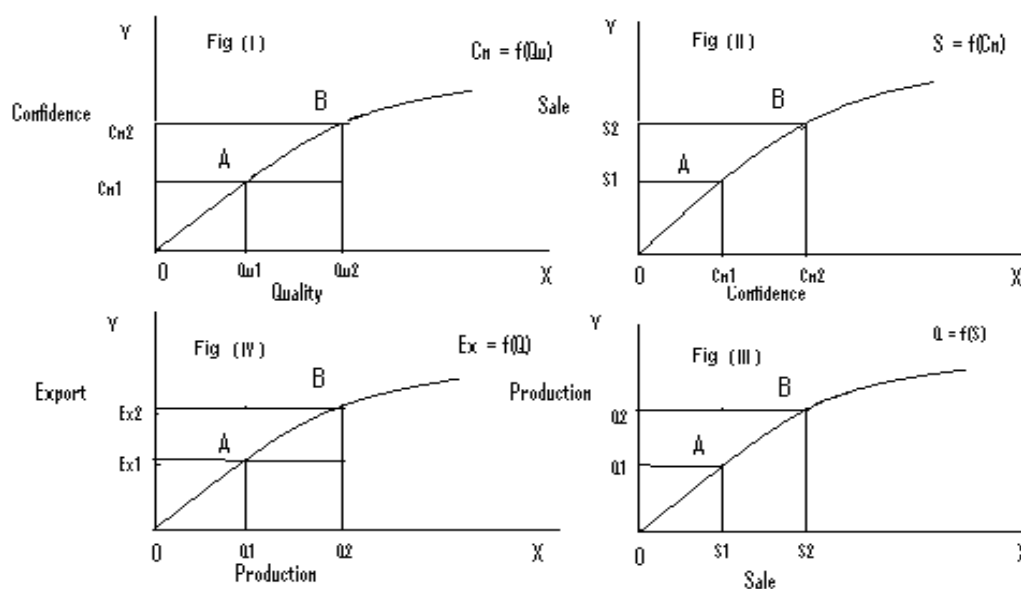
⁴ *The Daily Prothom-Alo*, Dated-07.11.2007

⁵ Export Promotion Bureau

Impact of the Quality Improvement on Sales, Production and Export

A general idea is quality improvement increase the consumer or buyers' confidence level and this raise the sale, production and export level of the country. How quality improvement increases confidence of the customers, sales, production and export is shown bellow by a four figure integrated diagram:

Fig – B: Impact of the Quality Improvement on Sales, Production and Export



In the first figure of the above diagram it shows that quality improvement increases the customer's confidence on the products/producing medicines. When confidence grows, sales of the products (drug) of the producers increase, which is shown in the second figure. The third figure shows that sales of the products (drug) increase influences in growing the production which in turn create employment. Finally the fourth figure shows that production increases ultimate increase the volume of export which in turn increases foreign exchange earning.

Scenario of our Pharmaceutical Sector

Before liberation the demand for pharmaceutical products largely met through imports and very few local companies were involved in production in this sector and Prominent among them were: (I) Pfizer, (II) Glaxo, (III) Fisons, (IV) Squibb, (V) Hoechst, (VI) ICI, (VII) May and Baker and (VIII) Organon.

In 1982, the National Drug Policy and the Drug (Control) Ordinance was made. This policy had made a new door for the pharmaceutical sector of this country and after that the production of pharmaceuticals has been growing fast. The pharmaceutical sector is a highly globalize industry. It is a high technology and capital intensive industry. Recently, the pharmaceutical sector of Bangladesh has made significant progress. Today the

pharmaceutical sector has created an example by ensuring the supply of quality medicines in the healthcare sector of the country. A production scenario of finished drugs is shown below in table.

Table : Amount of Production of Finished Drugs

(In Million Taka)

Year	Production of Finished Drugs
2000	17,921.72
2001	20,417.22
2002	30,500.68
2003	32,384.00
2004	32,857.88
2005	40950.31
2006	44456.70
2007	51492.71
2008	59295.67
2009	70960.50

Source: Directorate General of Drug Administration (DGDA)

The annual average growth rate of our pharmaceutical sector in finished drugs has been estimated on average to be 13 percent covering a period of ten significant years.

Export of Pharmaceuticals

The history of pharmaceutical exports from Bangladesh dates back to late 1980's. At that point of time, only a few pharmaceutical companies of Bangladesh took proactive efforts to initiate export of pharmaceuticals from Bangladesh. But there was no support or incentive from the government to export pharmaceuticals. Then the companies with their own initiative started exporting finished formulations to some of the neighboring less-regulated overseas markets like Myanmar, Sri-Lanka, and Nepal. After being successful in these less regulated markets in early 1990's, few major companies of our country also took initiative to explore some of the more-regulated markets like Russia, Ukraine, Georgia and Singapore. Success in registering and marketing the products in these countries was a major breakthrough for the Pharmaceutical sector of Bangladesh. This was a clear testimony not only to our excellent product quality but also to our capabilities to meet stringent regulatory requirement. Today after catering the country's need Bangladesh pharmaceutical industry has successfully started exporting its quality medicines to above 84 countries across four continents. Although volume wise the amount may not appear to be huge, but most important, it is growing at a very fast pace. According to the statistics available with the Export Promotion Bureau (EPB), Bangladesh exported pharmaceutical products and this is given below in table.

Table : Amount of Export of Finished Products/Drugs

(In Million Taka)

Year	Exports
2000	297.87
2001	311.80
2002	406.91
2003	545.46
2004	1400.00
2005	1421.00
2006	2519.98
2007	2347.10
2008	3131.07
2009	3352.07
2010	3274.32

Source: Export Promotion Bureau (EPB)

The average growth rate of export of pharmaceuticals is about 32% whereas the GDP growth rate is around 6%. This clearly represents the great future possibility of earning foreign exchange from this sector and also decreasing dependency on the only one sector the Ready Made Garments (RMGs) sector. Bangladesh not only exports the finished drugs but also the raw materials. The export of raw materials from Bangladesh is shown below in table.

Table : Amount of Export of Raw Materials

(In Million Taka)

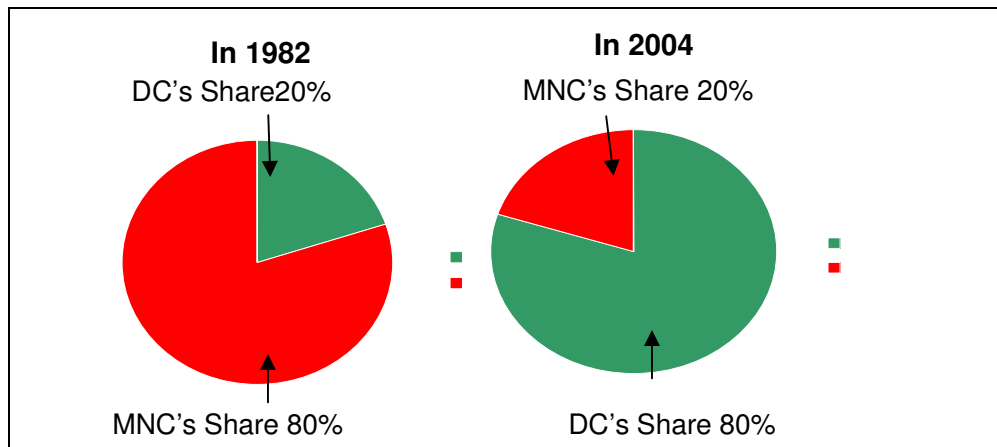
Year	Export of Raw Materials
2001	11.00
2002	43.00
2003	87.32
2004	138.97
2005	147.57
2006	143.41
2007	130.31
2008	146.12
2009	119.62
2010	51.19

Source: Directorate General of Drug Administration (DGDA)

Strong Footing of the Local Pharmaceutical Companies

Bangladesh has earned independence in 1971. The participation of local companies was only 15 percent and the MNC's were 85 percent before independence. In 1982 the multinational company's (MNCs) share in the domestic market was 80 percent and the rest were being made availing by the domestic companies. But in 2004 this scenario has been completely reverse. In 2004 the domestic company's share in the domestic pharmaceutical market has changed to 80 percent and rest was in the capture of the multinational companies (MNCs). It is shown below in two separate pie diagrams.

Past & Present Scenario of our Pharmaceutical Sector

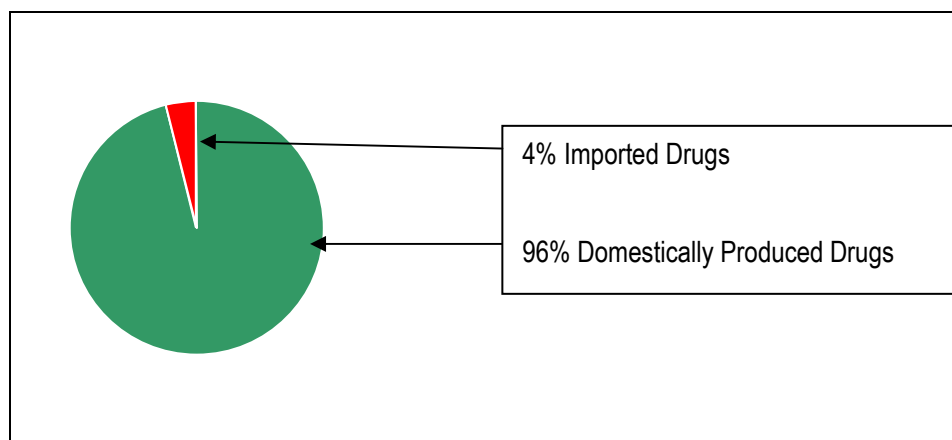


Source: Annual Report 2005; BAPS

This proves that the local companies are continuing their expansion and up gradation of their facilities conforming by occupying the greater proportion of the domestic market share in the field of pharmaceutical production.

There are several sectors for which Bangladesh can proud of and undoubtedly the pharmaceutical sector is one of these sectors. This sector is the second largest contributor to the government exchequer. There are above 250 pharmaceutical companies in this sector and the approximate total market size is about Tk.30,000 million per year of which about 96 percent of the total requirement of medicine has been catering by the local companies and the rest 4 percent has been met through imports. The imported drugs mainly comprise of the cancer drugs, vaccines for viral diseases, hormones, insulin etc. The supply of medicine by the domestic medicine producing companies and the import of medicine in Bangladesh is shown next page in a pie diagram.

Import Situation of Drug



Source: Annual Report 2005; BAPS

Before 1982 Bangladesh largely depended on the imported medicine and the pharmaceutical market of this country were flooded by the substandard drugs. Moreover the domestic market of medicine was controlled by the multinational companies (MNCs). Now 96 percent of the total demand for drugs has been catering by the local companies and the rest has been imported, which definitely represents the potential of the pharmaceutical sector in supplying WHO's (cGMP) standard medicines to the local market and also making the country self reliant in producing standard and quality medicines for the population in general.

Multinational Companies Position in Bangladesh

The number of multinational companies in Bangladesh is only three and those are:

- (I) Glaxo Smithkline Bangladesh Ltd.
- (II) Sanofi-Aventies (now Sandoz) Bangladesh Ltd. and
- (III) Novarties Bangladesh Ltd.

None of those is in the top ten positions. These companies's volume of production in Bangladesh is given next page in table.

Table : Volume of Production and Market Share of the MNCs

Name of the Company	Volume of Production	In Tk. million
		Market Share of the MNCs (In Percentage)
Sanofi-Aventies Bangladesh Ltd.	163.00	2.97
Glaxo Smithkline Bangladesh Ltd.	123.00	2.24
Novarties Bangladesh Ltd.	91.00	1.65
Total	377.00	6.86

Source: Directorate General of Drug Administration (DGDA); 2009

The above table shows that the total volume of production of the MNCs operating in Bangladesh is Tk.377.00 million and in percentage it is only 6.86 percent. This is not a remarkable figure for the total market size.

Conclusion

After 1982 the pharmaceutical sector of Bangladesh is growing very fast and gradually it catering an incremental share in world pharmaceutical market. This position has been created only for it quality products, though there are some negative reputations about this sector. To face the negative reputations the government should establish a world standard drug testing laboratory and it should also make a timeframe within which the pharmaceutical producers are bound to earn the world standardization certifications. Earning international standardization certificates will create the faith of the world.

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