CHAPTER - I

RESEARCH METHODOLOGY
1.1. Introduction:

Health is an important social and economic asset, a keystone for human development. Pharmaceutical sectors play a vital role in developing new medicines and to prevent dreadful diseases, thus improve the lives of patients. Its key contribution to medical progress is turning fundamental research into innovative treatments. The Pharmaceutical industry’s success rests on continuous innovation for the prevention and treatment of diseases, and for improvements in existing medicines and treatments. Despite challenging business conditions, the pharma industry undertakes investments that are risky than those in other business sectors. The Pharma sector by investing billions of dollars and thousands of scientist-hours, it pushes the limits of science, improves global health and contributes to the quality life and prosperity of society.

The new drug development has delivered major products to decrease human suffering from dreadful diseases, and increase longevity and well-being (Munos 2009). The flow of new products and services to patients and society is no longer able to sustain the business model (Dickson & Gagnon 2004; Munos 2009; LaMattina 2011). The global Pharma sector is under serious pressure from a large number of innovator molecules facing patent expiration, a thin pipeline of new drugs, regulatory challenges and pricing pressures. This had given chance to directional shift towards the emerging markets of Asia, Australia, Africa and Latin America, which are growing three times faster than the current growth rates experienced in the industry’s leading markets of North America, Japan and Europe. 40% of the global Pharma industry’s incremental growth over the next decade will come from the emerging markets (IMS health, 2010).

1.2. Pharmaceutical Sector in Sustainable Society:

The aim of the pharma sector is to design, usage and practices surrounding in balancing the health and well-being of society with the requirement of reducing the impact of pharmaceutical ingredients on the environment. The
design of novel drugs and all of the practices surrounding their manufacture and usage are central for minimizing their toxic effect on the environment and increasing the sustainability of healthcare (Daughton and Ruhoy 2008).

The process of reducing environmental liabilities also has the potential to significantly advance and improve the medical and economic outcomes for healthcare, as natural collateral benefits. Nature and environmental sustainability can be designed into the existing pharmacopeia and healthcare systems so that considerations of potential environmental impacts feed back into improvements for healthcare and human wellbeing (Eckerman and Martineus 1997).

The ways in which pharmacy is practiced will clearly have ramifications for environmental impact. The actual practice of pharmaceutical care is implemented using supplemental, collaborative or independent models of prescribing (Pearson 2007), where various degrees of autonomy for the pharmacist and degrees of involvement with the physician apply. Although the implementation of pharmacy systems differ widely around the world, the authority to prescribe has been extended in various degrees to nurse practitioners, physician assistants and pharmacists. The ultimate implementation is the empowering of pharmacists to act as prime prescribers rather than just dispensers. In effect, this evolutionary step is transforming pharmacy from a customer-oriented practice to a practice focused on patient care. Such initiatives help pharma sector beyond the sole focus of dispensing medications to the value-added knowledge of drugs.

Scientist working for bringing sustainability in quality healthcare closer to reality. These include information technology, personalized medicine, medical genetics and epigenetics, green chemistry applied to drug design, formulation, manufacturing and targeted drug delivery, and thus the overall initiatives called “medications management” and “pharmaceutical care.” These areas together largely dictate the shape and size of the environmental footprint for tomorrow’s armamentarium of medications (WHO, 2007).
Pharma sector play important roles in the protection and improvement of human and health and wellbeing. Treatment, diagnosis, palliative and curative, and prevention of disease, together with improved quality of life. The practice of medicine has become nearly synonymous with the knowledge of medications. The industry’s abilities and successes are a testament to over 150 years of innovation and R&D. The drug discoveries of the active ingredients in pharmaceuticals are now more than thousand that treat various dreadful diseases.

The immeasurable benefits of pharmaceuticals and of their ever-evolving sophistication, especially with the new applications of nanotechnology and biotechnology help the pharma sector in drug discovery (outlook magazine, 2011). A modern drug reduces the toxic effects as well as adverse reactions of the drugs from active pharmaceutical ingredients with narrow therapeutic windows and from cytotoxics in particular which include abuse and addiction, and unintentional poisonings.

The prominent roles played by pharmaceuticals in healthcare till dates are surreptitiously involved in a wide spectrum and many times it was not noticed by the rest of the world. These can have impact on both human and ecological health. These invisible roles involve a wide array of pathways that lead to unintended and perhaps unrecognized exposure, which serves to illustrate the interconnectedness of the activities and behaviors of humans with the environment (Alan Davies and Janet Jones, 2008). Actions designed to maintain, alter or improve human health and wellbeing have consequences for the environment, which in turn can feed back to impact human health.

Over the centuries pharmacy practice had gone many phases of the development. This includes periodic restrictions and expansions in the roles played by pharmacists in their relationship with patients. In modern pharmacy the role of pharmacists expanded under a concept called “pharmaceutical care,” which has been merging with an allied concept called “medications management” (Bajcar et al. 2005; Woodend 2003). With its origins beginning in
the 1970s, a widely accepted definition of pharmaceutical care was published by Hepler and Strand (1990) as: “Pharmaceutical care is the responsible provision of drug therapy for the purpose of achieving definite outcomes which improve a patient’s quality of life.” The history, evolution and wide diversity of approaches in its implementation among countries have been covered in many publications over the last few decades (recent examples being Berenguer et al. (2004), Martin-Calero et al. (2004), Pearson (2007) and van Mil et al. (2004)).

After independence there are various industries working effectively. Company act 1956 includes various provisions from establishment of the company. A pharmaceutical company is also one type of industry which provides health care products so the role of pharmaceutical company has been very consistent as well as important in the field of industry.

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Pharmaceutical industry has been one Industry which has been growing continuously, immune to economic recession and commodity cycle. The industry is knowledge driven and its intellectual assets are the key determinants. Pharmaceutical Sector covers products like Tablets, Capsules, Liquid orals, Lotions & Liniments, Creams & Ointments, Powders, and Injectable etc. The consumption of the above are directed mainly through specialized medical fraternity which are adequately informed about their usage and other medical information related to it.

The growth of Pharmaceutical Industry as a healthcare segment will always be high as long as the drug consumption increases due to growing health
problems of living beings. Other positive factors of growth include ageing global population and opening up of markets in USA, Europe, Latin America and Asia. Also Investors continue to have high expectations from the pharmaceutical industry. In spite of all these positive, there are some challenges the industry has to address.

The competitive and technological changes in the pharmaceutical industry, starting from powerful new drug discoveries to innovative R & D partnerships and marketing plans are reshaping the business strategies of many pharmaceutical companies. R&D spend by major pharmaceutical companies & the current trend in the allocation of R&D in therapeutic segment.

In view of the challenges of increasing uncertainties, rising population, new diseases incidence, resurgence of certain diseases, shortening of product cycle besides rigorous competition from multinationals. The pharmaceutical industry has been forced to look into their financial statements analysis for survival, health and growth.

1.3. Need of the Study:

Financial statements are records that provide an indication of the organization’s financial status. It quantitatively describes the financial health of the company. It helps in the evaluation of company’s prospects and risks for the purpose of making business decisions. The objective of financial statements is to provide information about the financial position, performance and changes in financial position of an enterprise that is useful to a wide range of users in making economic decisions. Financial statements should be understandable, relevant, reliable and comparable. They give an accurate picture of a company’s condition and operating results in a condensed form. Reported assets, liabilities and equity are directly related to an organization's financial position whereas reported income and expenses are directly related to an organization's financial performance. Thus, Financial Performance is the blue print of the financial
affairs of a concern and reveals how a business has prospered under the leadership of its management personnel performance of any organization. Analysis and interpretation of financial statements helps in determining the liquidity position, long term solvency, financial viability, profitability and soundness of a firm. There are four basic types of financial statements: balance sheet, income statements, cash flow statements, and statements of retained earnings.

After Information Technology sector Pharmaceutical sector is the second fastest growth sector in the World. IMS Health (2014) stated that world pharmaceutical market was valued at US$ 875 billion with a growth rate of 4.1% over the previous year at the constant exchange rate.

The Indian pharmaceutical Industry has witnessed a robust growth of around 14% and India's pharmaceutical industry is now ranked as the third largest industry in the world in terms of volume and its rank is 14th in terms of value. The Indian pharmaceutical sector is highly fragmented with more than 20,000 registered units with severe price competition and government price control. It has expended drastically in the last two decades.

As per the literature and discussion with many stalwarts from different Pharma Companies it was realize that there is a great scope to systematically investigate the financial performances of some Indian Pharmaceutical companies. A sound financial base will depend upon the availability of adequate finance, smooth, regular and at reasonable cost. For a bright success, management of finance and evaluate its performance is an important function of finance manager of public limited company. The researcher thought that the analysis and interpretation of financial statement of pharmaceutical company is also important because the role of pharmaceutical company in India GDP (gross domestic product) is immense and average growth rate is 14% per year.
1.4. Terminology:

The researcher had used following terms in research work. Some of the important and key words are as under:

a) Analysis and interpretation  
b) Company  
c) Financial statement  
d) Fund flow statement  
e) Cash flow statement  
f) Ratio Analysis  
g) Annual Report  
h) Auditor Report  
i) Budget  
j) Variations

1.5. Objectives Of Research:

In the interest of financial policy, every company should also analyse its accounts periodically. The financial statements are frequently voluminous and detailed to the points where they are almost useless to top management. The proposed study will attempt to through some light in order to contribute to the knowledge about successful analysis and interpretation of financial statements of pharmaceutical companies:

a) To throw light on the role of pharmaceutical industries in human life.

b) To study the various pharmaceutical companies in India

c) To analyze functioning processes, organizational structure and financial statement of different pharmaceutical companies in general in India.
d) To discuss different aspects of financial statements in the light of pharmaceutical company.

e) To understand, analyze and interpret the basis concept and profile of Glenmark Pharmaceutical Ltd.

f) To analyze the financial statements of Glenmark Pharmaceutical Limited.

g) To through light on problem faced by pharmaceutical industries and try to suggest problem solving mechanism related to interpretation of data.

1.6. Hypothesis:

Analysis and interpretation of financial statements are an attempt to determine the significance and meaning of the financial statements data so that a forecast may be made of the prospectus for future earnings, ability to pay interest etc., Financial statement analysis is largely a study of the relationship among the various financial factors in a business as disclosed by single set of statement and a study of the trend of these factors as show in a series of statements.

Following are the important hypothesis which are tested:

$H_0$: Pharmaceutical companies in India are facing various problems relating to maintain their books of accounting.

$H_1$: International accounting standards and Indian accounting standards are not correlated to each other so that pharmaceutical companies are confused about the application of accounting standards for analysis and interpretation of their financial statement because of their multinational functioning.

$H_2$: Glenmark Pharmaceutical has maintained its financial statements by following rules and regulation.
1.7. Research Methodology:

The area of study is pharmaceutical industries in India. However the researcher had selected ‘Glenmark Pharmaceuticals Ltd.’ as a case study, so the focus was given in detail on different parameters. The study was based on various types of research methodology such as source of data (Primary Data and Secondary Data), Sampling, analysis and interpretation. The details are as follows:

A) Sources of Data:

i. Primary Data – The information required for the study was collected through different sources. Primary data was collected by applying various sub-methods such as:
   a. Interviews
   b. Observations
   c. Schedules

ii. Secondary Data: Secondary data was collected with the help of following sources:
   a. Encyclopedia/Dictionary
   b. Reference Books
   c. Company Law
   d. Annual Reports of Glenmark Pharmaceutical Ltd.
   e. Auditor Report of Glenmark Pharmaceutical Ltd.
   f. Accounting standards framed by international accounting standard
   g. Articles from journals and magazines
   h. Internet website

B) Sampling: Researcher had taken a case study on Glenmark Pharmaceuticals Ltd so the scope of sampling is limited to Glenmark Pharmaceuticals Ltd.
C) **Analysis & Interpretations**: The analysis and interpretation was purely based on source data i.e. primary and secondary data.

1.8. **Scope of Research**:  

The scope of this research is related with study of financial statements in pharmaceutical industries in India – special focus on Glenmark Pharmaceutical Ltd.

1.9. **Limitations**:  

The researcher had some limitations while doing the research work. The collection of old data will be tedious job as well as the time period for the research work is 1st Apr.2008 to 31st Mar.2014. This research was based on information received to researcher through observations, schedules and other secondary data. If there is any lacuna in the information provided, the researcher will not be responsible for such things happen if any.