

# How 'Healthy' Is Health Care Industry in Information Disclosures: Revisiting Evidences in India

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## Abstract:

The information disclosed by the companies in their annual reports reveals much about company's performance and prospects. This study seeks to investigate the extent of voluntary disclosure practices prevailing in pharma sector of India, for the year 2010-11 to 2017-18. The study is deemed important because it would offer crucial information to investors in India's pharmaceutical industry. Methodologically, a disclosure checklist is constructed and descriptive statistics are carved out to reach the results. The checklist consists of 55 items which are not mandatory by law. In this stage, the intended objective was to ensure that graduate pharmacist engage other team members in healthcare organizations (whether at the departmental or unit level) and ensure that the existing modes of operation or systems are assessed, and their capacity to steer patient and family satisfaction analyzed, upon which weaknesses, if any, would be worked upon. Also, the objective of this procedure outcome was to ensure that as a graduate pharmacist, I bring about change toward improved safety and quality patient care while minimizing potential resistance, especially by utilizing any health care resources at their disposal optimally.

Findings are alarming to state that the highest score attained by any company throughout the period of 8 years was 37 (out of 55) not even meeting 80% of the total checklist score. This shows that pharmaceutical sector is not so friendly at disclosures. Another concept that emerged involved lifelong learning. Lifelong learning implies that through ongoing education and training, there is career satisfaction on the part of a graduate pharmacist, having transitioned through different career stages and also strived to improve the quality of patient care. Also, lifelong learning as a procedure outcome reflects the need for future preparedness, especially because different patients come from different socio-cultural backgrounds and present with diseases or illnesses of different severities, implying further that lifelong learning provides a platform for to respond to these dynamic issues or tailor the care provision process in a relevant and responsive way that is aligned to the populations' needs.

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## I. INTRODUCTION

Voluntary disclosures are common in the healthcare setting and can avert adverse events. Voluntary disclosures can occur in different forms including wrong prescriptions, wrong transcription, wrong drug formulation, and administration of the drug in the wrong dosage (Botosan, 1997). To deal with voluntary disclosures, stakeholders have directed little effort

to retail pharmaceutical organizations despite the fact that these pharmaceutical companies also contribute to voluntary disclosures such as prescribing errors due to poor labeling. This study will examine the factors contributing to voluntary disclosures in the Indian retail pharmaceutical context with the aim of understanding the causes and developing a reliable solution (Botosan and Plumlee, 2002).

### *1.1 The Concept of Disclosure*

Millions of Indians consume medications each day to treat illnesses, alleviate pain, or prevent sickness. However, while medication has improved the quality of life of many citizens, it has also become a serious cause of harm to the population of India because of the increase of pharmaceutical errors. Statistics from the Indian Department of Health Services indicate that adverse drug events lead to 280,000 hospital admissions every year. Cases of adverse drug events are likely to increase in the future due to sustained growth in the consumption of medications (Barry and Brown, 1986). It has been reported that the use of prescription drugs by Indian adults increased by 8% between 1999 and 2012. In 2006, 82% of Indians used at least one prescription drug, dietary supplement, or over the counter medication while 29% were using more than one prescription medication. As the number of people using medication increases, the probability of voluntary disclosures also increases significantly.

### *1.2 Incentives of Voluntary Disclosures*

The problem is that although a lot of effort has been made to address drug safety issues, not all the stakeholders and departments have achieved progress in this journey and pharmaceutical errors continue to happen at a high rate. In fact, major progress is only visible in the clinical environment; little effort has been put in the retail pharmaceutical setting. Since retail pharmaceuticals play a central role in meeting the medication needs of the population, they play an important role in influencing incidents of voluntary disclosures (Elliott Jacobsen, 1994). Several studies investigated the pharmaceutical errors, but none of those studies prescribed a fix nor did they determine the cause of the errors. Additionally, these studies concentrated on Hospitals only and not on retail pharmacies.

### *1.3 Pharmaceutical Sector in India*

The evolution of pharmaceutical sector in India has taken place in four different phases. Beginning with the first phase before 1970, the Indian pharmaceutical market was dominated by foreign companies with almost negligible presence of domestic companies. Second phase was pre liberalization phase between 1970 to 1990 (Gelb & Zarowin, 2002). During this phase Indian parliament passed Indian Patent Act which helped in boosting of pharmaceutical business in India. It helped in mushrooming of domestic pharma firms and started operations during early 1990s (Hamrouni and Hermann 2012). Third phase began with new economic policy driving LPG 1991 onwards, export driven market was set up which lead to several business initiatives to carry out operations in other countries With the Patent Act 2005, Indian products acclaimed their own patents and India became a destination for generic drugs. Fourth phase had begun since 2010 with increased number of pharma companies and rising number of patents. Companies have increased their R&D spending on new cost effective generic products to mark their presence across global market (Omair et al., nd).

## **II. Literature Review**

The Earliest studies on Voluntary Disclosure center around finding out the contents required to be disclosed voluntarily, reasons to disclose them and studying the factors that influence the extent of disclosure. Published annual report is a mandatory requirement of corporate but management realizes economic gains from disclosing voluntarily. Company Management recognizes that there are economic benefits to be gained from well managed disclosure policy (Williams, 2001; Healy et al., 2000; Lang and Lundholm, 2000). The publication of Freeman (1984) the idea of 'organisations have stakeholders' has become more provoking. The concept laid by Freeman suggested companies to

take on the activities expected by identifiable group of people who can affect or are affected by the activities of the organization. The approach of Freeman is further highlighted by Clarkson (1995) that the organization should not only take up the activities affecting stakeholders but also report those activities to stakeholders. Therefore, organizations choose to disclose voluntarily about their efforts towards different stakeholders above and beyond the mandatory limits. This approach is closely associated with Legitimacy theory as discussed in section 1.4.3 of the thesis. Deegan (2000) suggests that there is a social contract between a company and the society which requires the company to be responsive to the environment in which it operates. Lot many studies and legal frameworks have contributed towards the need of voluntary disclosure. The rising inadequacy and dissatisfaction with mandatory disclosures have demanded that companies should provide comprehensive disclosure about the long term strategies and performance (Leuz and Verrecchia, 2000; Meek and Gray, 1989; Spero, 1979. Also, nowadays the agenda of the corporate is to regain the lost trust of stakeholders due to world scandals of Enron, Worldcom etc. Full disclosure plays crucial role in avoiding corporate reporting fraud (Beasley; 1996). Guan et, al. (2007) find that in order to protect stakeholders' and enhance transparency, the regulatory authorizes of countries have exerted a great pressure on detailed disclosures thus reducing the occurrence of agency problem arising out of information asymmetry.

This presupposition of restoring stakeholders' faith by transparent disclosure leads to signaling theory. Firms with good performance tend to make detailed disclosure more readily as it may distinguish them from marketplace. Chow and Wong Boren (1987) provide support to the argument that voluntary disclosure can positively affect quality of performance. Cooke (1989) establishes relationship between liquidity and

disclosures proposing that firms with better liquidity are better performers and thus are more prone to disclose voluntarily. But the findings of Wallace et, al. (1994) develop a contrary approach to that of Cooke. Wallace et, al. claim that weak firms are more prone to amplify the disclosures as they have to justify the liquidity status. The empirical findings of Wallace et, al.,(1994) developed in Spanish companies are opposite to those of Alsaeed (2006) who tested the same relationship in Saudi Arab and Barako et.al., (2006) in Kenya.

The review of the earliest studies that measured the general level of voluntary disclosure in the annual reports of companies is essential to get the basis of present study. Also, it gives a theoretical background to the current study. It also paves the way for the methods adopted for this study. There are various variables affecting Voluntary disclosure and then various ways by which those factors are affected by voluntary disclosures. A large number of studies establishing relationship between the voluntary disclosures and other variables have been carried out drawing mixed conclusions. All such studies reinforce the direction of each new researcher exploring different aspects of one concept. Likewise, the association of Corporate Voluntary disclosure with each new variable (may be cost of capital, stock price, profitability, liquidity, solvency, operating Revenue etc.) carves out a new version of Voluntary Disclosure affecting the values of the firms. Thus the association between the Corporate Voluntary disclosures and the value of pharmaceutical companies(as measured by WACC, stock price volatility and market to book value ratio) derives its base from the findings of various other studies who have tried to study these associations individually or collectively with other variables.

One of the pioneers in this field were the findings of Sanghavi and Desai (1971) who empirically examined the relationship between the voluntary

information disclosure by US Companies and six other characteristics of firms (size of the assets, number of stakeholders, rate of return, ratio of net profit to net sales, size of the firm and its listing status on national/ international stock exchange). The study was carried on 155 firms out of which 100 were listed and 55 were unlisted. A self constructed disclosure index was used and 34 items were put on disclosure index scale. The analysis done using Multivariate regression analysis found that there is a positive relationship between six independent variables and the extent of voluntary disclosure in annual reports.

Another elaborative and innovative research in this field in the early years was by Buzby (1975) tested the relationship between the disclosure extent and two firm characteristics (size of the company as measured by asset size and listing status) on a disclosure index of 39 items from 44 manufacturing companies of US. The innovation in the study was the development of disclosure index. It was developed by dividing the items of annual reports in three major groups:-

Group 1: Self-contained items

Group 2: Items disclosed on varying degree of specificity

Group 3: Items deriving their value from sub elements of information

First two groups had their own score depending upon the extent of information. The collective scores of first two groups were used to form score for the third, a relative measure of disclosure expressed as a percentage of the extent of actual disclosure to the extent of disclosure that could be done. Important to mention that, relative disclosure was a dependent variable in the study.

The results of the study showed that the extent of disclosures is positively affected by the company size. Larger the company, the better the extent of information disclosure in the company annual reports. Whereas the relationship between the information disclosure and listing status was

found to be Nil i.e., no association could be witnessed between the two.

Another association of voluntary disclosure is evidenced with capital market. Choi (1973) studied the relationship between financial disclosure level and firm's decision to enter Capital Market of Europe. He took a sample of 18 companies for a period of 5 years. The time period was divided between before and after the issue of entering European capita market. The results of the study concluded that firms raising funds from European capita market significantly improved their quality of disclosure.

Shankar Tilak (1972) carried out a Comparative study between 50 Indian and 25 foreign companies on the basis of 24 parameters of financial statements disclosed voluntarily. The study concluded that Indian Financial statements meet mandatory requirements completely but are least informative when it comes to disclosing the information voluntarily. On the other hand, Foreign Financial reports were found more informative on voluntary disclosure practices being followed.

Singh D.R and Gupta (1977) in their study '*Corporate Financial disclosure in Indian Companies*' has evidenced that public sector companies disclose more information than private sector companies. They studied the correlation of seven organizational factors with quality of disclosure by establishing 32 items on disclosure index. The study found that 4 out of 7 factors have no impact on quality of disclosure. Only 3 factors taken under study were significant to depict the quality of disclosure and they were- number of shareholders, ownership pattern and age of the company. They further suggest that professional auditors can set minimum standards of disclosure for companies and thus they can pay a vital role in improving the quality of disclosure in India.

Various studies have been carried out in Indian market to judge the quality of disclosures in India. One such study by Chander.S (1992) titled



'Corporate Disclosure practices' compared disclosure practices of 50 public companies with 50 private companies during the year 1980-81 to 1984-85 by defining 98 items of disclosures on a disclosure index for comparison. By Using measures of dispersion, T-Test, F-Test, Regression, the author concluded that item wise and company wise disclosure was significantly better in public sector companies as compared to private sector companies. Not only this, the author also studied the company specific attributes like size of the company, age of the company, profitability and nature of the industry that have an impact on the disclosure quality in the annual reports. Among all the factors, the author found that age of the company has a significant impact on quality of disclosures both in public as well as private sector companies. The author emphasized that the control of C&AG is a major factor for better disclosures in public sector companies.

Lal.J (1985) regressed four company characteristics i.e. size of the company, Earnings of the company, Nature of Industry and association with large industry house, on the quality of disclosure. Out of these four factors, the study found that size of the company had a better association with voluntary disclosure. This means large companies have better incentive to disclose voluntarily and are motivated to disclose more in their financial reports (Schutter and Connell, 2006; Verrecchia, 1990).

The study of Diamond and Verrechhia (1991) contradicted the study of Macquary et.al. Their study compared companies with more disclosures in their financial reports with those of companies with less disclosure and carried out a comparative study to know the impact of voluntary disclosure on information asymmetry. The study found that increasing public information in financial reports is likely to reduce information asymmetry. High disclosure also increases the liquidity of the firm's stock.

The increasing demand for health literacy comes at a time when technological applications such as telehealth and the use of devices such as hospital wayfinding apps and Asthmapolis sensors have gained increasing use. As such, graduate pharmacists have had to accommodate the technological provisions in their practicum projects and workplace operations to ensure that they keep abreast of this dynamic nature of the healthcare industry.

### III. Objective of the study

To ascertain the extent of voluntary information disclosures in Indian Pharmaceutical Companies listed on Bombay Stock Exchange (BSE)

### IV. Research Methodology

The target Companies will be those listed on Bombay Stock Exchange (BSE). The population of study will be the current staff of retail pharmaceutical organizations. The study will target pharmacists from India. Pharmacists will be interviewed at appropriate times, and the researcher will seek to gain more understanding of the types of voluntary disclosures registered in their organization, the seriousness of the errors, and the factors contributing to these errors. The data will also include organizational records and observation of the medication dispensing and management practices at the retail pharmaceutical industry. The implication for social change includes the potential to provide leaders in the retail pharmaceutical industry with information that will help them address the issue of voluntary disclosures. This qualitative descriptive case study seeks to investigate the problem by exploring the nature of voluntary disclosures in the retail pharmaceutical context and associated factors. The study will focus on a population drawn from the current staff of retail pharmaceutical organizations in the Indian healthcare industry. Findings of the study will help leaders in the retail pharmaceutical industry to address the issue of

voluntary disclosures. The study will also advance research on the subject of medication safety by identifying new areas for future research.

This study will utilize the qualitative and quantitative research method because there is little information about the specific problem of pharmaceutical errors and qualitative research fits perfectly when investigating new phenomena, thereby allowing greater adaptation to the relationship between study participants and the researcher. This means that it is possible for the researcher to ask open-ended questions or follow-up questions based on the responses given to clarify issues. The researcher is also at liberty to ask different participants different questions and increase or decrease the number of participants during the study. The qualitative method is also more suitable to the purpose of the study, which is to gain an in-depth understanding of the nature of the voluntary disclosures and factors that contribute to these errors in the retail pharmaceutical context. A qualitative method will facilitate deeper inquiry by providing flexibility when it comes to data collection. The researcher will get the opportunity to engage authentically with study participants resulting in the collection of rich data. Another advantage of the qualitative approach is that it will not limit participants' responses leading to a development of deeper insights regarding the research issue.

The researcher will utilize descriptive case study design. Descriptive studies focus on collecting information without manipulating variables or changing their environment. A descriptive case study design is appropriate for this work because the researcher does not have control over the study variables. Hence, he must study them as they occur in their natural environment. The case study design focuses on studying an individual, a group, or situation using multiple methods of data collection. In this case, the researcher will focus on retail pharmaceutical companies operating in

the Philadelphia, Pennsylvania Area. This design is appropriate because it also facilitates the collection of in-depth data. The researcher will not only obtain information from pharmacists but also capture contextual information by using other methods of analyzing data such as observation.

#### V. Analysis and Interpretations

In pharmacy and other academic and professional fields, disclosures play a significant role in capturing the progress and accomplishments of an individual's life, having completed a certain procedure. Also, disclosures are important because they provide room for ascertaining areas of strength, growth, or achievement, as well as pave the way for the determination of any weaknesses or unaccomplished areas. The eventuality is that the weaknesses that an individual notes from a given procedure experience, especially those that might have arisen due to the failure to address barriers to progress, could be used as opportunities for future improvement; hence, preparedness for any uncertainties in an otherwise dynamic world[15-20].

Historically, it has been challenging to deal with voluntary disclosures due to a lack of reliable diagnostics and information about the same. In fact, causalities due to medication in the past were higher than they are today. Thanks to better diagnostic tools, proper labeling, advancement in technology, improvement in pharmacists and physician training, interdisciplinary cooperation, and patient awareness, the incidence of prescription errors have reduced in relative terms.

Table 1  
Classification of Information Items for Voluntary Disclosure

Sl. No	Classification Item	Items	Percentage
1	I. General Corporate Information	12	21.82
2	II. External Audit Committee	7	12.73
3	III. Financial Information	5	9.09
4	IV. Forward-looking Information	9	16.36
5	V. Employee Information, Social Responsibility and Environmental Policy	14	25.45
6	VI. Board Structure Disclosure	8	14.55
	Total	55	100.00

Table 1 shows that all the statements related to voluntary disclosure in the annual reports of the pharmaceutical companies are classified into broad 6 dimensions and consist of 55 items related to the 6 dimensions under the study period (2010-11 to 2017-18). Currently, the pharmacy practice comes at a time when the needs of patients and the demands of system stakeholders are dynamic. Also, the practice comes at a time when nurses have to be prepared to serve in different healthcare settings, which have varying geographical and demographic features. The above procedure outcome seeks to ensure that nurses are capable of integrating scientific findings from other disciplines or areas such as organizational sciences, quality improvement, public health, genetics, and biopsychosocial fields toward continual pharmacy care improvement.

Table 2  
Item wise Voluntary Disclosure Score

Classification of Items	2018	2017	2016	2015	2014	2013	2012	2011
<b>I. General Corporate Information</b>								
1. General information about the economy	92.31	100.00	100.00	100.00	92.31	100.00	92.31	92.31
2. Corporate mission statements	69.23	76.92	69.23	69.23	69.23	46.15	38.46	38.46
3. Brief history of the corporation (the establishment and development)	30.77	23.08	15.38	15.38	7.69	23.08	23.08	30.77
4. Description of major goods/products	38.46	15.38	30.77	23.08	23.08	38.46	15.38	15.38
5. Analysis of enterprises' market share	69.23	76.92	76.92	69.23	61.54	61.54	53.85	46.15
6. Business environment (economics, political...)	23.08	15.38	15.38	15.38	23.08	15.38	15.38	15.38
7. Statement disclosures relating to competitive position in the industry	23.08	15.38	15.38	15.38	15.38	23.08	15.38	15.38
8. Description of marketing networks for finished goods/products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9. Information of member companies	61.54	46.15	46.15	38.46	46.15	46.15	38.46	38.46
10. Methods of quality control	23.08	15.38	38.46	23.08	15.38	23.08	15.38	23.08
11. Company's achieved awards	61.54	69.23	76.92	61.54	53.85	61.54	46.15	30.77
12. Corporate contributions to the national economy	30.77	30.77	30.77	46.15	23.08	7.69	7.69	7.69
<b>II. External Audit Committee</b>								
1. The role and function of the audit committee	92.31	92.31	92.31	92.31	84.62	76.92	76.92	76.92
2. Names and qualifications of the members of audit committee	76.92	76.92	76.92	76.92	69.23	76.92	76.92	76.92
3. Number of members on audit committee	84.62	92.31	92.31	84.62	84.62	76.92	76.92	76.92
4. Number of committee meetings	84.62	92.31	92.31	84.62	84.62	84.62	84.62	84.62
5. Attendance at committee meetings	53.85	53.85	53.85	53.85	53.85	46.15	46.15	46.15
6. Statement of independence	92.31	92.31	92.31	84.62	84.62	84.62	84.62	84.62
7. Report on completed work	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>III. Financial Information</b>								
1. Summary of financial data for the last 3 years or over	84.62	76.92	69.23	61.54	61.54	69.23	61.54	69.23
2. Share price information	92.31	92.31	100.00	92.31	84.62	92.31	92.31	84.62
3. Retained profit	84.62	84.62	84.62	84.62	76.92	76.92	76.92	76.92
4. Bank loan, mortgage and their use	76.92	76.92	76.92	69.23	61.54	46.15	38.46	38.46
5. Advertising and publicity expenditure	15.38	15.38	23.08	15.38	0.00	0.00	0.00	0.00

<b>IV. Forward-looking Information</b>								
1. Factors that may affect future performance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2. New product/service development	61.54	61.54	61.54	53.85	46.15	38.46	46.15	38.46
3. Marketing plan, distribution system expanding plan	15.38	30.77	15.38	23.08	0.00	7.69	0.00	0.00
4. Effect of business strategy on future performance	15.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5. Research and development expenditure	53.85	69.23	69.23	53.85	46.15	53.85	53.85	61.54
6. Projection of cash flows	7.69	7.69	7.69	0.00	0.00	0.00	0.00	0.00
7. Earnings per share forecast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8. Planned capital expenditure	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9. Future profit forecast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**V. Employee Information, Social Responsibility and Environmental Policy**

1. Total number of employees for the last or more years	84.62	84.62	76.92	76.92	61.54	61.54	46.15	46.15
2. Category of employees by gender	53.85	53.85	38.46	23.08	23.08	23.08	7.69	7.69
3. Amount of employee remuneration, remuneration policies and bonus	69.23	61.54	69.23	61.54	46.15	38.46	23.08	30.77
4. Policy on employee training	38.46	38.46	30.77	15.38	7.69	7.69	0.00	7.69
5. Expenses for employee training	0.00	0.00	0.00	7.69	7.69	7.69	0.00	0.00
6. Reasons for change in employee number	7.69	0.00	0.00	0.00	0.00	0.00	7.69	7.69
7. Qualification of the accountants	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8. Data on workplace accidents	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.69
9. Disclosure of welfare policy	15.38	15.38	7.69	0.00	0.00	0.00	0.00	0.00
10. Recruitment policy	30.77	23.08	15.38	7.69	0.00	0.00	0.00	0.00
11. Factors of corporate culture	15.38	7.69	0.00	7.69	0.00	0.00	0.00	0.00
12. Information about safety policy	84.62	84.62	46.15	38.46	23.08	23.08	7.69	30.77
13. Cost of safety measures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14. Environment protection programs	100.00	100.00	76.92	69.23	53.85	53.85	38.46	53.85

**VI. Board Structure Disclosure**

1. Education and professional qualification of directors	61.54	53.85	53.85	53.85	53.85	61.54	61.54	61.54
2. Directors' interests in competing businesses	30.77	30.77	38.46	23.08	23.08	30.77	23.08	23.08
3. Directors' shareholding in the company and other related interests	84.62	84.62	76.92	76.92	46.15	38.46	46.15	46.15
4. Number of meetings per year	92.31	92.31	92.31	92.31	84.62	84.62	84.62	92.31
5. Director's analysis of the fee and other benefits disclosure	76.92	69.23	69.23	69.23	61.54	61.54	53.85	53.85
6. Role and function of the remuneration committee	84.62	76.92	84.62	76.92	69.23	61.54	61.54	61.54
7. Directors' current accounts/loans to officers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8. Directors' interests in significant contracts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 2 shows that for calculating item wise voluntary disclosure score. This study strived to ensure that there is team-based health care in such a way that for communities, families, and individuals, health services are provided by two or

more health providers or health care practitioners, who are expected to collaborate with both the caregivers and patients. In the course of the graduate pharmacy procedure, it is ensured that in practical experiences, they analyze patients' preferences before embracing high-quality and coordinated care through sharing the intervention goals and rationale with other departmental or unit members in the healthcare firms. Some of the specific health teams with which I collaborated included the administration and support services group, ancillary services or teams, contingency teams, coordinating teams, and core teams responsible for direct patient care.

Table 3  
Company wise Disclosure Scores

Company/Year	2018	2017	2016	2015	2014	2013	2012	2011	Average Score	Average % (2010-18)
CADILA	25	25	18	18	19	17	17	22	20.13	36.59
BIOCON	26	27	28	27	24	25	22	22	25.13	45.68
CIPLA	28	27	28	24	13	13	13	13	19.88	36.14
PIRAMAL	37	31	30	25	20	17	18	17	24.38	44.32
DREDDY	26	28	26	23	24	26	12	12	22.13	40.23
LUPIN	27	24	24	25	24	24	22	21	23.88	43.41
TORRENT	15	14	14	10	8	7	7	7	10.25	18.64
PFIZER	32	30	28	26	12	16	10	14	21.00	38.18
GLAXO	15	16	15	17	15	16	15	15	15.50	28.18
DIVIS LAB	17	20	20	13	15	18	18	16	17.13	31.14
AURO	32	28	30	29	28	28	25	26	28.25	51.36
AJANTA	16	17	17	17	18	15	14	15	16.13	29.32
SUNPHARMA	22	22	21	20	18	16	14	15	18.50	33.64

Table 3 is about the voluntary disclosure scores obtained by the companies from the year 2010-11 to 2017-18 is calculated for the companies selected for the purpose of the study. Given that pharmacists are patients' advocates, it is expected that they establish a balance during patient care delivery. Some of the ethical dilemmas that pharmacists face include the end-of-life stage and care and staffing ratios. Notably, pharmacists who



care for patients such as those with disabilities experience various dilemmas, especially when the patients in question are at risk for self-harm. Therefore, the above procedure outcome sought to ensure that as a graduate pharmacy procedure enrollees, they abide by principles, standards, and guidelines governing ethical and informed decision-making, should I encounter a patient or situation that poses dilemma and calls for decision-making based on specific codes of conduct.

Table 4

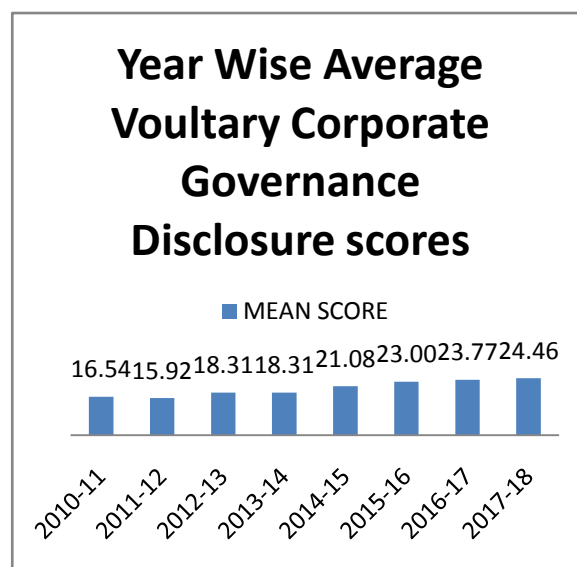
Descriptive Statistics of Voluntary Disclosure Score

	2018	2017	2016	2015	2014	2013	2012	2011
Mean	24.46	23.77	23.00	21.08	18.31	18.31	15.92	16.54
Standard Error	1.97	1.54	1.61	1.60	1.58	1.63	1.42	1.40
Median	26.00	25.00	24.00	23.00	18.00	17.00	15.00	15.00
Mode	26.00	27.00	28.00	25.00	24.00	16.00	22.00	15.00
Standard Deviation	7.11	5.54	5.79	5.75	5.71	5.89	5.11	5.06
Sample Variance	50.60	30.69	33.50	33.08	32.56	34.73	26.08	25.60
Kurtosis	-0.93	-0.98	-1.54	-0.62	-0.56	-0.19	-0.39	0.09
Skewness	0.05	-0.54	-0.27	-0.56	-0.05	0.09	0.15	0.17

The above table 4 depicts that mean score of the companies for voluntary disclosure ranges from 16.54 to 24.46 starting from the year 2011 to 2018. Indeed, this procedure outcome strives to ensure that graduate pharmacists play a leading role in implementing system changes in a manner that seeks to improve health care outcomes via patient satisfaction. Examples of such forms of system improvement, which the outcome seeks to inculcate into the knowledge and skills of graduate pharmacists, include improvements in pharmacy or staffing ratios, technological changes and incorporation into health care services (such as telehealth and electric health records, and strategies seeking to reduce patient falls and enhance safety; a specific example being the

implementation of the hourly rounding procedure).

Graph 1 .Year wise Mean score of Voluntary Disclosure



The above graph shows mean score of the companies for voluntary disclosure ranges from 16.54 to 24.46 starting from the year 2011 to 2018. The objective of this procedure outcome was to provide room for graduate pharmacists to link theory to research and engage in research-based procedures through which any problems identified from the previous literature could be examined and relevant strategies recommended toward improved patient care, translating further to solutions to clinical problems.

Table 5

Top Five Companies on the basis of Voluntary Disclosure Score

Rank	Company	Average Disclosure Score
1	AURO	28.25
2	BIOCON	25.13
3	PIRAMAL	24.38
4	LUPIN	23.88
5	DREDDY	22.13

## VI. Conclusion

Several studies investigated the pharmaceutical errors but none of those studies prescribed a fix nor did they determine the cause of the errors. Additionally, these studies concentrated on hospitals only and not on retail pharmacies. There is a wide body of literature examining the nature of voluntary disclosures in the healthcare system. Voluntary disclosures in a computerized physician order entry system have been investigated and found that the error rate was 19%, and over 66% of errors were due to incorrectly entered prescriptions. The error rate among elderly patients upon admission to hospital was 46%. Other types of errors that literature has pointed out include documentation errors, wrongtime, wrong dosage, and omission, as well as prescription errors. These studies have, however, explored the nature of voluntary disclosures in the hospital setting without providing any cause or suggesting a fix.

Empirical evidence reveals that voluntary disclosures result from a wide range of factors. Some of these factors include staffing levels and workload, practitioners' knowledge and experience, attitude and culture of staff, location and packaging of medications, and systems used in the management of medications. Most of existing studies explore risk factors for voluntary disclosures within the hospital setting. There is also a gap in evidence regarding nature of voluntary disclosures and factors associated with these errors in pharmaceutical organizations operating within the community setting.

Numerous studies have shown that voluntary disclosures are rampant. For instance, voluntary disclosures, which can be in the form of writing (prescription errors) or in the form of medication and dosage provided (prescribing errors), are common in hospitals and in general practice and these sentiments are echoed. Empirical evidence also show that voluntary disclosures result from a wide range of factors including staffing levels and

workload, practitioners' knowledge and experience, attitude and culture of staff, location and packaging of medications, and systems used in the management of medications.

In the past, human error was viewed as a cause of the accident. However, the new view is that human error is a symptom of trouble deeper inside a system. In the old view of human error, one had to seek failure to explain it. This means that one had to explain failure by finding the bad judgment, the inaccurate assessments of situations, and the wrong decisions that people made leading up to the failure. In the new view of human error, failure is explained by not trying to find where people went wrong, but by finding how the assessment of a situation by a "failed" individual made sense at a specified time in the past considering the circumstances that prevailed at the time.

The new view of The Human Error Theory by Sydney Dekker is better than the old view because it regards people as vital to creating safety; human beings have the ability to negotiate between safety and other pressures in the real world. The new view also regards human errors as a demonstration of the ability of human beings to negotiate between safety and other pressures even in the midst of ambiguous evidence and uncertain outcomes.

For this procedure goal or intended outcome, the objective was to ensure that as a graduate pharmacist, they tailor health care practices to the needs of a given community, population, patient, or family after analyzing issues such as their risk factors for certain conditions, their lifestyles, and their socio-economic and cultural statuses. In so doing, the outcome strived to ensure that the interventions they implement recognize the needs and preferences of the populations served and that their wishes are also considered during health care, hence proving culturally sensitive and considerate. To conclude, the present disclosure system in India fails to distinguish between the

very different needs of the users of the financial reports.

## VII. References

- [1]. Botosan, C.A. (1997), Disclosure Level and the Cost of Equity Capital, *The Accounting Review*, vol. 72 (3), pp. 323-349.
- [2]. Botosan, C.A. and M.A. Plumlee (2002), A Re-examination of Disclosure Level and the Expected Cost of Equity Capital, *Journal of Accounting Research*, vol. 40 (1), pp. 21-40
- [3]. Barry, C., and S. Brown. "Differential Information and Security Market Equilibrium." *Journal of Financial and Quantitative Analysis* 20 (1985): 407-422.
- [4]. Elliott, K.E., P.D. Jacobsen (1994), Costs and benefits of business information disclosure, *Accounting Horizons*, vol.8 (4), pp. 80-96.
- [5]. Gelb David.S; Paul Zarowin (2002) "Corporate Disclosure Policy and the Informativeness of Stock Prices Review of Accounting Studies"; Mar 2002; ABI/INFORM Global pg. 33
- [6]. Hamrouni, Amal; Ratsimbanier, Hermann (2012) "The Extent of Voluntary Information in the Annual Report and the Share Price Volatility: Application of DEA and SFA on the French Market" *Journal of modern Accounting and Auditing*; July 2012.
- [7]. Hassan Omaina A.G, Peter Romilly, GianluigiGiorgioni, David Power: The value relevance of disclosure: Evidence from the emerging capital market of Egypt *The International Journal of Accounting*, Volume 44, Issue 1, Pages 79-102
- [8]. Healy, Paul M. and Palepu, Krishna, Information Asymmetry, Corporate Disclosure and the Capital Markets: A Review of the Empirical Disclosure Literature (December 2000). JAE Rochester Conference April 2000.
- [9]. Lang, H.L., R.J. Lundholm (2000), Voluntary Disclosure and Equity Offerings: Reducing Information Assymetry or Hying the Stock, *Contemporary Accounting Research*, vol. 17 (4), pp. 623-662.
- [10]. Leuz, C., and Verrecchia (2000) "The Economic Consequences of Increased Disclosure." *Journal of Accounting Research* (2000): 91-124
- [11]. Meek, G. K. and Gray, S. J. (1989), "Globalisation of Stock Market and Foreign Listing Requirement: Voluntary Disclosures by Continental European Companies Listed on the London Stock Exchange", *Journal of International Business Studies*, Vol. 20(2)
- [12]. Spero, L. L. (1979), "The Extent and Causes of Voluntary Disclosure of Financial Information in Three European Capital Markets: An Exploratory Study", *Harvard University (Unpublished)*.
- [13]. Schutter P. and V.O Connell (2006) "The Trend Toward Voluntary Corporate Disclosures" *Management Accounting Quarterly*, 7, no. 2 (Winter) 1-9.
- [14]. Verrecchia, R.(1990) "Information Quality and Discretionary Disclosure." *Journal of Accounting and Economics* 12 (1990): 365-380.
- [15]. Kurian, J., Christoday, R.J. and Uvais, N.A., 2018. Psychosocial factors associated with repeated hospitalisation in men with alcohol dependence: A hospital based cross sectional study. *International Journal of Psychosocial Rehabilitation*. Vol 22 (2) 84, 92.
- [16]. Melnichuk, M., 2018. Psychosocial Adaptation of International Students: Advanced Screening. *International Journal*

- of Psychosocial Rehabilitation. Vol 22 (1) 101, 113.
- [17]. Daly, A., Arnavut, F., Bohorun, D., Daly, A., Arnavut, F. and Bohorun, D., The Step-Down Challenge. International Journal of Psychosocial Rehabilitation, Vol 22(1) 76, 83.
- [18]. Srinath, R. and Sendilvelan, S., 2017. Behavioral Problems Perceived by the Alcoholic and His Family A Study among Males in Rural Areas. International Journal of Psychosocial Rehabilitation. Vol 21 (2) 13, 19.
- [19]. Sari, S.P., Dwidiyanti, M., Wijayanti, D.Y. and Sarjana, W., 2017. Prevalence, demographic, clinical features and its association of comorbid depressive symptoms in patients with schizophrenia. International Journal of Psychosocial Rehabilitation, 21(2).
- [20]. Fuadi, L., 2017. Influence of Behavioral Counseling Techniques, Token Economy and Parent's Parenting Class of Behaviour Prosocial X SyamsulhudeTegallingsah. International Journal of Psychosocial Rehabilitation, 21(2).
- [21]. **Web Links:-**
- <https://www.kellogg.northwestern.edu/accounting/papers>
  - [www.mcombs.utexas.edu/~media/.../Clinch%20Verrecchia030512.pdf](http://www.mcombs.utexas.edu/~media/.../Clinch%20Verrecchia030512.pdf)
  - <https://olin.wustl.edu/docs/Faculty/Dye.pdf>
  - [www.nber.org/papers/w14897](http://www.nber.org/papers/w14897)
  - [www.emeraldinsight.com/doi/pdf/10.1108/14691930710830765](http://www.emeraldinsight.com/doi/pdf/10.1108/14691930710830765)
  - [www.rug.nl/research/portal/files/14494335/thesis.pdf](http://www.rug.nl/research/portal/files/14494335/thesis.pdf)
  - [pasj.org/IJIM/Volume2Issue7/IJIM02.pdf](http://pasj.org/IJIM/Volume2Issue7/IJIM02.pdf)

- [www.indianjournaloffinance.co.in/index.php/IJF/article/view/72089](http://www.indianjournaloffinance.co.in/index.php/IJF/article/view/72089)
- <http://www.afm.nl>
- <http://www.fasb.org>
- [www.ibef.org](http://www.ibef.org)

#### Annexure

Following are the contents under each category: -

<b>I. General Corporate Information</b>
1. General information about the economy
2. Corporate mission statements
3. Brief history of the corporation (the establishment and development)
4. Description of major goods/products
5. Analysis of enterprises' market share
6. Business environment (economics, political...)
7. Statement disclosures relating to competitive position in the industry
8. Description of marketing networks for finished goods/products
9. Information of member companies
10. Methods of quality control
11. Company's achieved awards
12. Corporate contributions to the national economy
<b>II. External Audit Committee</b>
13. The role and function of the audit committee
14. Names and qualifications of the members of audit committee
15. Number of members on audit committee
16. Number of committee meetings



17. Attendance at committee meetings
18. Statement of independence
19. Report on completed work
<b>III. Financial Information</b>
20. Summary of financial data for the last 3 years or over
21. Share price information
22. Retained profit
23. Bank loan, mortgage and their use
24. Advertising and publicity expenditure
<b>IV. Forward-looking Information</b>
25. Factors that may affect future performance
26. New product/service development
27. Marketing plan, distribution system expanding plan
28. Effect of business strategy on future performance
29. Projection of research and development expenditure
30. Project of cash flows
31. Earnings per share forecast
32. Planned capital expenditure
33. Future profit forecast
<b>V. Employee Information, Social Responsibility and Environmental Policy</b>
34. Total amount of employees for the last year or more years
35. Category of employees by sex
36. Amount of employee remuneration, remuneration policies and bonus
37. Policy on employee training
38. Expenses for employee training
39. Reasons for change in

employee number
40. Qualification of the accountants
41. Data on workplace accidents
42. Disclosure of welfare policy
43. Recruitment policy
44. Factors of corporate culture
45. Information about safety policy
46. Cost of safety measures
47. Environment protection programs

<b>VI. Board Structure Disclosure</b>
48. Education and professional qualification of directors
49. Directors' interests in competing businesses
50. Directors' shareholding in the company and other related interests (e.g. stock options)
51. Number of meetings per year
52. Director's analysis of the fee and other benefits disclosure
53. Role and function of the remuneration committee
54. Directors' current accounts/loans to officers
55. Directors' interests in significant contracts