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OUR ANNUAL SEMINAR AT GLANCE

Sr. No.	Date	Theme	Venue
First Annual Seminar	12th Feb 2004	Managing Structural Changes in Financial Sector	Hotel Grand Maratha
Second Annual Seminar	12th Nov. 2005	Sustaining Growth in An Organisation	Hotel Ramada Plaza Palmgrove
Third Annual Seminar	4th Nov. 2006	Developing& Implementing Growth Strategies	Hotel Taj Land End
Fourth Annual Seminar	19th Dec. 2007	Leading Change in & Innovation	Hotel Grand Hyatt
Fifth Annual Seminar	8th Nov. 2008	India Inc- Challenges Next	Hotel Taj Lands End
Sixth Annual Seminar	11th Dec. 2009	Creating Winning Organisations (Pragati)	World class Atharva Auditorium, 3rd Phase AET Campus, Malad (W)
Annual Conference	16th Jan. 2010	Competing in the Times of Uncertainity (Aswamedh)	World class Atharva Auditorium, 3rd Phase AET Campus, Malad (W)
Annual Conference	4th & 5th Feb. 2011	Emerging issues in global economy and management-Challenges & Strategies	World class Atharva Auditorium, 3rd Phase AET Campus, Malad (W)
SeventhAnnual Seminar	11th Feb. 2011	Transforming Organizations: Emerging Trends(Parivartan)	Presentation Hall,3rd Phase, AET campus, Malad (W).
Annual Conference	12th Nov.2011	"Global Turmoil - Opportunities For India"	World Class Auditorium,3rd Phase, AET campus, Malad(W).
Panel Discussion	4th Feb. 2012.	"Gender Inclusivity In India-Building An Empowered Organization"	Seminar Hall, 3rd Phase, AET campus, Malad-(W).
Annual conference	12th Jan.2013	Panel discussion on "Reassuring Confidence In India"- Road Map To recovery "	Seminar hall, 3rd phase, AET campus, Malad-(W)

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The main objective of this journal of management research is, dissemination of knowledge, encompassing emerging management concepts and to widen professional horizons, in the dynamic socio-cultural, economic, political and technol

The following guidelines are to be adhered to while submitting the manuscript.

1. Research articles with original findings are welcome.
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2. Minimum number of words-3000.

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INFRASTRUCTURE

EVENTS

MESSAGE, FROM THE EXECUTIVE PRESIDENT.

Shri Sunil Rane
Executive President, Atharva Group of Institutes
Founder Secretary, Atharva Educational Trust

As the new year 2014 dawns I take the opportunity on behalf of "Atharva Group Of Institutes" to wish you all a successful and eventful year ahead.

The pursuit of excellence has been an eternal quest of mankind and it is my belief that we indeed have a reason to commit ourselves to the subjective well being of our human capital. At "ATHARVA" our constant endeavour is to go beyond the captivity of standard functions and try to embrace new dimensions of learning. In this unique life of today we try to be harbingers of change and constantly try and be ahead of change.

This is not just limited to our state- of art infrastructural facilities but also in terms of development of human capital and best practices. We have won several laurels in 2013 including first prize in Dandekar Trophy in case- study competition by our students, also being in the best top 50 B-schools survey 2013 across India. We have also won laurels for our best innovative teaching techniques. Atharva has also been ranked in the top 20 of India's Best B-Schools for the best industry interface.

Our institution has taken unique steps and initiatives for improving the quality of business education and development of students under the guidance of the faculty members. In 2014 we look forward to reaching new heights of success and progress while working holistically to ensure that every student can develop himself/herself in a congenial environment that promotes personal and professional growth. Research is one dimension of such development.

We solicit your scholarly contribution of research papers, articles, case-studies, in accelerating the process of learning.

Hope you enjoy reading this issue of our "ATHARVA" Journal.

Atharva Educational Trust

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EDITORIAL

Leaders need to connect with the business realities and understand the environmental and organizational challenges in managing business and help in resolving them. Businesses undergo changes constantly but people generally resist change.

Good leaders explain, push or dictate at times to overcome the factor of resistance to change by the employees. They have also realized that it is meaningless to treat business and talent separately. Excellence is a result of creating environment that releases human potential and aspirations. If an organization wants innovation and future readiness, learning has to move beyond training.

Effective communication skills help in building teamwork and minimizing miscommunication which is crucial for qualitative production and services at the work place. Creative thinking helps in decision making, problem solving and in bringing about innovation.

This issue of the "ATHARVA" Journal highlights on the relevant research work done in the different areas of management ,encouraging young professionals to contribute their perspectives.

Wish you all - Happy Reading !

Best Wishes & Regards

Dr. Rekha Shenoy.

Atharva

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An Assessment of the Services Quality of Gujarat Higher Education

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Abstract

The history of the universities in Gujarat is relatively recent; however their impact on the Indian case and wellbeing is undeniable. Today, almost forty years later the universities in Gujarat like many higher education institutions in the region and worldwide tussle to fulfil the students' demands on education while trying to maintain high quality and relevant education. In Gujarat; studies of higher education sector seems to focus primarily on easily quantifiable indicators such as teacher vs. students ratios and gender participation, while the assessment of educational services quality have not yet been explored and the assessment of higher education from the students' stands point is yet to be enhanced. Meanwhile; the literature is rich with scholars who emphasize that "service quality" is the key to achieve customers' satisfaction and loyalty. The applicability of service quality concepts and assessment models is becoming more acceptable within the higher education arena.

This research presents an assessment of the services quality at two universities in Gujarat; utilizing the SERVQUAL gaps model and instrument for measuring students' satisfaction and behavioural intentions. The study wishes to assist the Gujarat based universities administrative boards and stakeholders to create informed decisions with regards to the effectiveness of their educational policies. The results suggest that the "service quality" in Gujarat based universities is slightly unsatisfactory to the students and needs further attention.

Keywords: SERVQUAL, service quality, assessment, Gujarat based Universities.

Introduction

The 1980's witnessed an unprecedented interest in the service industry sector. The sector emerged as a fundamental pillar in modern economy and encouraged scholars such as

Grönroos (1999) Buzzell and Gale (1987) and Bai and Liu (2002) to name a few, who emphasized that service quality have a direct and fundamental influence on customer loyalty. Cronin, Brady and Hult (2000) suggested that service quality affects customer loyalty indirectly by influencing the customers' satisfaction and perceived value (R. Zhang, Li and Y. Zhang 2010). On the other hand, the higher education sector in the Asian region and worldwide has been rendered by societal, national, regional and global changes. These changes pertain to fierce competition over state fund, the age structure of the students and unprecedented increase in the number and models of newly established higher education institutions to fulfil the students demand on education (Chen 2012; De Jager and Gbadamosi 2010). The Gujarat based universities are no exception.The Gujarat based Universities are relatively young; however their impact on the Indians' life, wellbeing and cause is undeniable. Today, almost forty years after they came to existence, the Gujarat based universities like many higher education institutions in the region and worldwide tussle to fulfil the students' demands on education while trying to maintain high quality and relevant education.

The review of the literature of higher education sector in Gujarat suggests that most of the studies focus on easily quantifiable indicators such as teacher versus students' ratios, access to higher education and equity. These studies rarely assess the education quality from the students' standpoints nor assess the service quality.

The applicability and adaptation of the service quality concepts and assessment models into the higher education sector have attracted much attention in recent years; where many education institutions conceptualize them as a major goal to achieve (Temizer & Turkyilmaz 2012). Astin (1993) noted that "related satisfaction levels and the students' perceptions of quality will determine student retention". He suggested the presence of "a direct association between student satisfaction and retention … the strength of these associations and their prevalence across all measures suggest that one promising way to reduce an institution's dropout rate is to focus more attention on student satisfaction". Among the most well known models developed to measure the service quality in higher education is the service quality gaps model, mostly known as the "SERVQUAL model" by Parasuraman, Zeithaml and Berry (1985). The authors argued that each time a customer encounters a service; the customer judges the quality of the service in question against his/her expectations. Therefore similar to the "service industry sector" any academic institution that attempts to evaluate the quality of its educational services should comprehend the expectations and perceptions of its prime customers beforehand, hence the students and exerts efforts to meet as closely as possible their expectations.

This study presents an assessment of the service quality at two universities in Gujarat

utilizing an enhanced SERVQUAL instrument to measure students satisfaction and loyalty intentions.

Literature Review

Service Quality in Higher Education

Scholars have long contemplated over a universally accepted definition of services and service quality; however their task proved to be an uneasy one. Grönroos (1990: 27) defined services as "Activities or a series of activities of more or less intangible nature that normally, but not necessarily, take place in interactions between the customer and service employees and/or physical resources or goods and/or systems of the service provider, which are provided as solutions to customer problems" Zeithaml and Binter (1996:5) defined services, including educational services as "deeds, processes and performances". The difficulty to define services is attributed to the unique characteristics of the services which distinguish them from goods. These unique characteristics of services posed further challenges to scholars to assess the performance of the service sector. Services are described as intangible, heterogeneous, inseparable and Perishable.

The review of the literature of service quality suggests that most of the definitions of service quality tends to be consumer- oriented (Kessler 1995). Lewis and Booms (1983: 100) defined service quality as a 'measure of how well the service level delivered matches the customer's expectations. Defining service quality in the context of higher education is no less elusive. Reeves and Bednar (1994) conclude that "the search for a universal definition of quality and a statement of law like relationships has been unsuccessful" and recommend that the definition of service quality in education should follow the general definitions of service quality. This encouraged the higher education community to adopt a few of the models that were developed originally to measure service quality in the private sector to investigate the service quality within the higher education setting (Lovelock 1981; Chua, 2004). Gatfield, Barker and Graham (2006) explored Australian and International students' perception of quality variables in an Australian higher education setting. The authors developed and used a scale comprised of 26 quality variables. Their findings revealed a hierarchy amongst the factors where "academic instruction" was the most critical aspect. De Jager and Gbadamosi (2010) studied the service quality and the students' intention to leave the university, trust in management of the university and the overall satisfaction with the university at two local higher education institutions in South Africa. The study revealed significant relationship between service quality in HE and other study variables—intention to leave the university; trust in management of the university and overall satisfaction with

the university.

Parasuraman et al. (1988) defined service quality as "the extent of discrepancy between customers' expectations or desires and their perceptions" and operationalized this definition as the disconfirmation between customers' perceptions minus their expectations (SERVQUAL= Perceptions - Expectations). The authors proposed ten dimensions of service quality with five basic gaps to be analyzed and these are: Tangibility, Reliability, Responsiveness, Competence, Courtesy, Credibility, Cecurity, Access, Communication and Understanding the consumer. Their research was later refined leading to the development of the SERVQUAL scale which measures customers' perceptions of service quality. The original ten dimensions were later condensed into five dimensions and these are:

? Tangibles: Appearance of Physical facilities, equipment, personnel, and communication materials

? Reliability: Ability to perform the promised service dependably and accurately

? Responsiveness: Willingness to help customers and provide prompt service

? Assurance: Knowledge and courtesy of employees and their ability to convey trust &confidence

? Empathy: Caring, individualized attention the firm provides its customers

The authors suggested that regardless of the service being studies, "Reliability is the most critical dimension while tangibles are the least". The instrument has been described as "tried and tested instrument which can be used comparatively for benchmarking purposes" (Brysland and Curry, 2001). The model was first adopted into the higher education context to measure academic library service quality by the Association of Research Libraries (ARL); and was called LibQUAL (Awan & Mahmood 2011). The study of service quality in higher education utilizing the SERVQUAL instrument has been empirically tested over the past few years; and while some of these studies are conceptualized globally, others were concerned with testing the service quality instrument on the country level. Soutar and McNeil (1996) utilized a modified SERVQUAL instrument to test the students' views of the quality of academic and administrative services provided in an Australian university.Their study found the students to be quite satisfied with the quality of the academic units surveyed; although there were gaps in reliability, responsiveness, assurance, empathy, knowledge and communication however those were small in magnitude. Sahney, Banwet

and Karunes (2004) studied students within selected educational institutions in India utilizing the SERVQUAL methodology. The authors later used the quality function deployment technique to identify the set of minimum design characteristics/quality components that meet the requirements of student as customers of the educational system. Tan & Kek (2004) adopted an enhanced approach to measure the students' satisfaction at two local universities in Singapore utilizing the SERVQUAL instrument. Their approach involved the use of factors which concern the student services that are queried and surveyed using the SERVQUAL methodology within 76 different areas. Their results identified large gap scores at both universities for school authority and communicating with the university's management. The students' expectations were better met for university facilities and social activities at one of the two universities.

In Malaysia, Shekarchizadeh, Rasli and Hon-Ta (2011) assessed the service quality perceptions and expectations of international postgraduate students studying in selected Malaysian universities utilizing a modified SERVQUAL instrument. Their study included 35 items distributed into five factors: professionalism, reliability, hospitality, tangibles, and commitment. The study concluded that the international postgraduate students attending five Malaysian universities have negative perceptions of education service quality in their universities, as students' expectations were not met in the performance of education services. The students were dissatisfied with the education service quality on all the five aforementioned quality factors. The authors attributed the students' dissatisfaction to the international students benchmarking the Malaysian universities to Western universities in America and Europe as a general class for higher education. Though researchers of service quality admit that the measurement of service quality closely conforms to the disconfirmation paradigm (Bitner, Booms and Tetreault 1990; Bolton and Drew 1991) however these researchers suggest that service quality and satisfaction are distinct constructs. Cronin and Taylor (1992) suggested a definition of service quality as a form of "attitude and a long run overall evaluation" while satisfaction is a "transaction-specific measure". Students' satisfaction is becoming widely accepted by the higher education community as a significant factor to the academic institutions strategic interests.

Students with higher satisfaction levels are more likely to reflect a positive image about the university and recommend the university to other potential students which would enhance the university competitiveness among other tertiary education institutions (Jiewanto, Laurens and Nelloh 2012). Students' satisfaction with their university not only contributes to the university's image and reputation it contributes significantly to the students' educational achievement (El Ansari & Oskrochi 2006). A student who is satisfied with his/her courses, teachers or university services would feel proud to be a student of that particular institution, would recommend it to other potential students or even return to the same

institution if considered furthering his/ her education. This is well supported in the literature which suggests that students' feedback is a vital element in the quality improvement and student satisfaction (Harvey 1997; Kanji and Tambi 1999; Williams & Cappuccini-Ansfield 2007; Houston 2008).

Service Quality is a well established prerequisite for maintaining a strong and positive relationship with the customers (Young and Varble 1997). In a higher education context; the students' perceptions of the service quality at their universities is both significant and strategic to the students' current and future relationship to the university (Cronin and Taylor, 1992). Spreng and Mackoy (1996) identified perceived service quality as an antecedent to satisfaction. Lassar Manolis and Winsor (2000) suggested that there should be a proper "understanding of the determinants of customers' satisfaction". This understanding has a tremendous monetary value for the service organization in a competitive environment (Abu Hasan, Ilias, Rahman and Abd Razak 2008). The study by Bigne, Moliner and Sanchez (2003) found that satisfaction is highly influenced by overall service quality. Ham and Hayduk (2003) in their study of higher educational settings confirmed the presence of a positive correlation between perception of service quality and student satisfaction.

Relation between Service Quality, Students Satisfaction and Behavioural Intentions

It is very important to understand the students' behavioural intentions. The emphasis on students' behavioural intentions contributes to the profitability of loyal customers (Minami & Dawson, 2008). Studies in the field of consumer satisfaction suggest that as a consequence of satisfaction individuals exhibit both attitudinal and behavioural intentions towards the products or service (Andreasen 1977; Day 1977). Students' loyalty intentions are also known as the word of mouth intention. Word of mouth intentions are formed from two famous concepts and these are word of mouth (WOM) and behavioural intentions (Jiewanto et al., 2012). Word of mouth intentions are characterized as oral, person-to-person communication between a receiver and a communicator whom the receiver perceives as non-commercial, regarding a brand, product or service (Arndt 1967). They signal the customer's willingness to recommend the service to other prospect customers in the near future (Dabholkar Shepherd and Thorpe 1995). Student satisfaction is also generally assumed to be a significant determinant of positive word-of mouth, retention and loyalty (Temizer & Turkyilmaz 2012). The students' loyalty intentions and satisfaction with the service level at their universities are strongly inter-related to each other. The concepts of students' satisfaction and loyalty have become one of the major goals of all educational institutions. Naik, Krishna and Gantasala, (2010) emphasize that the service quality and customer satisfaction are antecedent to behavioural intentions. In other words when the

students are satisfied with the service level at their universities they are most likely will recommend the university to other prospect students. Of the other factors which contribute to influence the students' behavioural intentions is the university image (Chung, Thorndike and Hwang 2009; Lin & Lin, 2007; O'Cass & Lim, 2010).

Higher Education perspectives in Gujarat

Recently and particularly during the last 8-9 years the country has witnessed a tremendous growth in the founding of management institutions, most of them in private sector offering management programs in different functional areas of management. Concurrently, there is a mushrooming of B-schools in the country, as well as in the Gujarat State: leading to issues of quality. In this context it becomes essential to examine the service quality of management education. Currently there are more than 100 Self finance institutes affiliated to Gujarat Technological University running MBA programme and Grant-in-Aid management course run by various university department in Guajarat. Apart from this, there is number of institutes present offering PGDM courses in the state. Looking at this scenario it seems essential to measure students' perception of service quality of management education in Gujarat state.

The construct or the dimension of quality conceptualized in the service literature focus on perceived quality. Conceptually, perceived quality is defined as the consumer's judgement about an overall entity of excellence or superiority (Parasuraman, Zeithaml, & Berry, 1988) . It is a form of overall evaluation. The definition offered by Gordon and Partigon (1993) characterized the general approach to education quality: "The success with which an institution provides educational environments which enable students effectively to achieve worthwhile learning goals including appropriate academic standards". In the area of higher education the concepts of what constitutes quality is still developing and keep on emerging because the education environment is dynamic.Higher education is undergoing sea changes during recent past in India in general and in Gujarat in particular. A Three-dimensional force - from State Government, Central Government and UGC and NAAC is being imposed to enhance the quality in HEI. Accordingly, HEIs are taking efforts in this direction. Many institutions and colleges have undergone accreditation and reaccreditation process. Some are ready for third phase of accreditation. NAAC is the sole agency imposed with the responsibility of accreditation of HEIs in India, which is able to assess only 6000 out of 32000 HEIs during last two decades from its inception (1994). This underlines limitations of NAAC to prove an institution capable enough to assess and accredit all HEIs in India. This also underlines late awareness about service quality in HEIs and reluctance on the part of policy makers to consider the issue seriously and make adequate provision for assessment and accreditation of all HEIs in India after specific intervals. Quality and its

assessment at present in India look as if it is optional. In this situation, it will be very much interesting to see how students perceive and evaluate service quality in HEIs in India.

Students evaluate service quality based on their expectations. They compare experienced service quality with their expectations. Their expectations may change over the time, therefore, the quality aspects today in the eyes of students (customers) may not remain the same tomorrow and they are bound to change. This calls for continuous monitoring and evaluation of service quality in any service organization. Such researches are found rarely in HEIs in India.

Method

Study Background

The study focus on two universities (named here; University A and University B) in Gujarat.

The two universities provide three levels of tertiary education. University A provides an undergraduate and a graduate program while University B provides a diploma, engineering and postgraduate programs. This study presents an assessment of the service quality in Gujarat based universities as perceived by their students utilizing the SERVQUAL gaps model.

Populatio

$$S = \frac{x^2 NP(1-P)}{d^2(N-1)+x^2P(1-P)}$$

The study u…ejcie and …gan, 1970 equation to determine the sample size:

Where (s) the size of sample required, N is size of population, P is ratio of population (estimated as 0:50 to give the maximum sample size) and d is the degree of accuracy expressed as 12:05 x^2 = chi-square value for 1 degree of freedom at 0.05 level (3841).

The participating universities provided the researcher with the total number of students attending their universities respectively: University A 7902, and University B 2968. Based on the aforementioned equation the total sample size is 375 respondents.

The data made available to this study was gathered through questionnaire administered to1200 students in a random manner in order ensure reaching the intended number of surveys; later only fully answered surveys were considered for further analysis. The

students were assured to the confidentiality of their answers; therefore their names were not included in the survey format. The data was collected during the first week of Oct 2013 and the data from both universities was later combined together and considered representative of traditional universities in Gujarat; as it ensured representation of respondents for the following reasons: the two universities combined provide three levels of study (two year diploma; engineering, an postgraduate program and a graduate program); the two universities are located in two different locations in the Gujarat and they both receive students from different parts of Gujarat including cities; towns and villages camps.

Survey Instrument Development

The study adopted the survey instrument from the work of Tan and Kek 2004. Tan and Kek (2004) designed the survey instrument specifically for use by a university through parallel review of educational service indicators from the work of Kwan and Ng (1999) and from Harvey (2002). Tan and Kek (2004) described the development of the current survey model as follows: In 1970, Betz, Klingensmith & Menne designed a survey instrument to measure service quality in education. The authors focused on educational support services and student encounters. Later in (1993) Hampton refined and condensed Betz et al. (1970) survey in order to "identify the different factors that contribute towards a quality education". The prime focus of Hampton's (1993) research was to develop "service indicators" by the students themselves. Hampton (1993) framed his questions in the form of a SERVQUAL survey which was carried out in the United States. In (1999) Kwan and Ng adopted the quality indicators developed by Hampton (1993). The authors argued that students' perceptions and expectations are often influenced by their cultural orientation. The authors considered cultural variables in service quality in their adaptation. Later Kwan and Ng (1999) conducted their survey in Hong Kong and China.

Meanwhile, Harvey and his associates conducted a parallel review at the Centre for Research into Quality (CRQ) at the University of Central England and latterly at the Centre for Research and Evaluation (CRE), Sheffield Hallam University (Harvey, 2002). Harvey's extensive review yielded the 'Student Satisfaction' model which has evolved over 14 years. The authors designed the model to be an effective tool to obtain, analyse, and report on students' views about their total university experience. A prime consideration of their research was the development of the service indicators by the students themselves. In 2004, Tan and Kek conducted parallel review of the educational service indicators from the work of Kwan and Ng (1999) and from the student satisfaction model by Harvey (2002) and combined the two lists of service quality attributes. Tan and Kek (2004) later tested the list from both reported studies on a pilot group of students. The results from the pilot test revealed 19 duplicative attributes which were later removed. The final result was a questionnaire instrument with 76 attributes. In line with SERVQUAL model, Tan and Kek (2004) constructed the 76 attributes of the survey to ask students to rate their expectations (E) and perceptions (P) of the educational service attributes.

Validity and Reliability of the Survey Instrument

The research took place in Gujarat; where the spoken language is Gujarati; still the questionnaire was developed in English and was validated and was conducted where amendments were carried out. A pilot test of the questionnaire was later introduced to students from the chosen Universities via email. 45 questionnaires were emailed to students from the participating universities. 21 complete copies were returned; ten from University A, and eleven from University B. The pilot test revealed one item that was confusing to the students; academic level. The researcher examined the internal consistency of the instrument using Cronbach alpha coefficient value using SPSS software. The Cronbach Alpha value was; 0.952 which exceeds the minimum level 0.7 recommended by Nunnally (1978)

Results

The Participants Demographic Profile

The survey initially asked students to identify four demographic attributes; gender; age; study level; and year of study. Three out of the four original attributes were selected for further analyses which are gender; age and study level. Year of study was dropped from further analysis since it would confuse the results. Table 1; summarizes the selected demographic attributes of the participants in this research

Table1. Selected demographic attributes of the survey respondents

	Frequency	Percent (%)
Gender		
Male	181	48.3%
Female	194	51.7%
Study Level		
Undergraduate	363	96.8%
Postgraduate	9	2.4%
Two years diploma	3	.8%
Age		
<= 18.00	23	6.1%
19.00 - 20.00	178	47.5%
21.00 - 22.00	152	40.5%
23.00 - 24.00	13	3.5%
25.00 - 26.00	4	1.1%
27.00 - 28.00	2	0.5%
29.00+	3	0.8%

The majority of the respondents who participated in the survey could be described as female; undergraduate students at the age 19 to 20 years old. The percentage of females who participated in the survey accounts for 51.7percent of the total population which is in parallel with the latest figures from the Gujarat ministry of Education and Higher Education statistics for the year 2010- 2011. According to the ministry for the academic year 2010/

2011 the total number of newly enrolled students at the traditional universities in Gujarat was 28,592 students; out of them 58.58 percent were female students (MOHE. 2011). The majority of the respondentswere undergraduate students accounting for nearly 97% of the students while only 2.4% of the total respondents were postgraduate students who were from University A and 0.8% were diploma students from University B.

The statistics released from the Gujarat Ministry of Education and Higher Education for the academic year 2010/ 2011 corresponds with the researchers' statistics. For the year 2010/ 2011 the total number of enrolled students at Higher Education Institutions by scientific degree was 74267 students; out of whom 86% were Bachelor students; 2.9 were Graduate students and 5.7% were two years Diploma students. The majority of the students surveyed were within the age group 19- 20 years old accounting for 47.5% followed by the age group 21- 22 years old which accounted for 40.5% both groups accounting for 88% of the total number of students surveyed.

Pre-Evaluation: Principle Component Analysis

To validate the instruments gap scores (perceptions minus expectations) a principle factor analysis utilizing Principle component analysis extraction method and VARIMAX rotation on all 375 surveys was conducted.
Prior to performing PCA the suitability of the data for factor analysis was assessed. The correlation matrix revealed the presence of many coefficients of 0.5 and above. The Kaiser-Meyer value was 0.91 which exceeds the recommended value of 0.6 (Kaiser 1970, 1974) and Barlett's Test of Sphericity (Barlett 1954) reached statistical significance which supports the suitability of the correlation matrix. The results from the principle component analysis revealed the presence of five components. The five components solution explained 64.4% of the variance.
The original survey instrument included 75 statements collapsed into eight factors. Following the principle component analysis, statements with a loading less than 0.5 were dropped from further analysis. The resulted statements accounted for 52 statements within five factors. The majority of the statements were returned to their original groups however some statements loaded on different components.
Computing facilities and Library facilities were returned successfully to their original classifications. The students seemed to perceive learning; teaching and advising as one component resulting in a new factor named Educational Activities (Learning, Teaching and Advising).The students perceived Library facilities as well as the amount and availability of other university facilities similarly, in addition to one component from social activities "The campus events and activities that are provided for students". This could be attributed to the fact that some of the activities take place at the university library facilities. The resulting five factors are; Learning, Teaching &Advising; Library facilities, Computing facilities, Assessment and University Facilities.

Reliability Test

The construct reliability using Cronbach's alpha coefficient was tested. Table 2 below summarizes the results from the construct reliability test; with the Cronbach alpha coefficient values. The results from the construct reliability test for the five constructs revealed a Cronbach alpha value which exceeds the ideal Cronbach's alpha coefficient value of 0.7 recommended by Nunnally (1978)

Table 2. Reliability test and Cronbach alpha coefficient values

Construct	Cronbach Alpha values	No. Of Items
Teaching, Learning &Advising	0.926	15
Library Facilities	0.930	14
Computer Facilities	0.803	9
Assessment	0.835	8
University Facilities	0.890	6

registered to the construct "Library Facilities" (mean 5.43). The second most important category of education services was "Computer Facilities" (mean 5.37); followed by University Facilities (mean 5.37) and Teaching; learning and Advising (mean 5.33). The least important component for the students was Assessment (mean= 5.24) (see table 3).

Table 3. The mean scores for students' expectations

Construct	Mean Expected
Learning, Teaching and Advising	5.33
Library Facilities	5.43
Computer Facilities	5.37
Assessment	5.24
University Facilities	5.36

the students' perceptions of the five educational service categories:

Table 4. Student's satisfaction with the educational services

Component	Mean Perceived
Learning, Teaching and Advising	4.75
Library Facilities	4.91
Computer Facilities	4.70
Assessment	4.75
University Facilities	4.89
Construct overall satisfaction	4.80

(mean= 4.91) registered for the "library facilities". The students' overall satisfaction with the educational services "Construct overall satisfaction" supported the findings where the results indicated high overall satisfaction with the educational services (mean= 4.80).

The Gujarat Students' Loyal Intentions

The students were loyal to their universities (Mean= 5.56, S.D. = 1.50).The results of the frequencies of the numeric scores (summarized in Table5) indicate that the majority of the students who responded to the survey (32.0%) are completely loyal to their respective universities compared to (20.5%) who considered themselves as completely non-loyal. The following largest group of students accounting for (28.3%) of the survey respondents considered themselves as loyal to their universities compared to (7.2%) who considered themselves non- loyal to their universities. Only (12.0%) of the respondents; considered themselves somehow loyal to their universities (see table 5).

Students Loyalty Intentions	Frequency	Percent
Completely Loyal	120	32.0%
Loyal	106	28.3%
somehow Loyal	45	12.0%
Non-loyal	27	7.2%
completely non-loyal	77	20.5%
Total	375	100.0

Service Quality of E

The results from t he most unsatisfactory component was "C educational service to satisfaction was U Assessment (mean= -

0.49), Library Facilities (mean= -0.51) and Teaching, Learning and Advising Services (mean= -0.57) (see table 6).

Table 6. Results of the mean expected values; perceived values and gap scores

Component	Mean Expected	Mean Perceived	Gap Scores
Learning, Teaching and Advising	5.33	4.75	-0.57
Library Facilities	5.43	4.91	-0.51
Computer Facilities	5.37	4.70	-0.67
Assessment	5.24	4.75	-0.49
University Facilities	5.36	4.89	-0.46

(M=4.83, SD= 0.86); t (373) = -0.56, p= 0.57 (two- tailed). The magnitude of the difference between the males and females mean (mean difference=0.9331, 95% CI: -0.23 to 0.13) was very small (eta squared= 0.0008) Cohen (1988, 284-7). Study Level and Overall satisfaction: The results from the analysis indicates that there was a statistically significant difference among the mean scores of the three subgroups at the p< .05 level in overall satisfaction: F (2, 372) = 7.76, p= .000. However the magnitude of the difference in the means between the three subgroups is
small to moderate (eta squared= 0.04) which indicate small to moderate effect Cohen (1988). Age and Overall Satisfaction: The results indicate a statistically significant difference at the p< .05 level in overall satisfaction for the seven subgroups: F (6, 368) = 2.089, p= .054. The magnitude of the difference in the means between the three subgroups (eta squared= 0.01) indicates small effect Cohen (1988).

The Relationship between Demographic attributes and Loyalty Intentions

Gender and Students' loyalty intentions: The results concludes that there was no significant difference in the Students' intentions between males (M= 5.71, SD= 1.53) and females (M=5.42, SD= 1.47); t (373) = 1.834, p= .068 (two-tailed). The magnitude of the difference between the males and females mean (mean difference= .285, 95% CI: -.021 to .590) was very small (eta squared= .008) (Cohen (1988).
Study Level and loyalty Intentions: The results indicates that there was statistically significant difference at the p< .05 level in Students' for the three subgroups: F (2, 372) = 4.097, p= .017. The magnitude of the difference in the means between the three subgroups is small (eta squared= 0.021) (Cohen (1988).
Age and Loyalty Intentions: The results indicate that there was statistically significant difference at the p< .05 level in Students' for the seven subgroups: F (6, 368) = 2.657, p= .016. The magnitude of the difference in the means between the three subgroups is small (eta squared= 0.041) Cohen (1988).

Relationship between Overall Satisfaction and Loyalty Intentions: The results from the correlation test suggest that there is a strong positive correlation between the two variables, r= +0.464; N= 375; where high satisfaction is associated with high intentions. Students satisfaction explained 21% of the variance.

Findings and Discussion

The reliability test supported the strength of the constructs composing the survey instrument and thus the applicability of the SERVQUAL survey model to be used in the context of the Gujarat higher education sector.

The first analysis in the study aims to uncover which service constructs are the most important and thus desired by Gujarat students. Given the current lack of knowledge of students' expectations in Gujarat students, this is an explorative research study utilizing a modified SERVQUAL instrument to investigate which service constructs are the most anticipated by the students. The analysis of the students' important service constructs revealed that the students considered all service constructs very important to them. Yet, the most important service constructs to the students are "Library Facilities" followed by "Computer Facilities". The results indicate that the Gujarat students want the Library facilities at their universities to be convenient and provide adequate spaces for private and group studies which are updated with wide range of books and periodic journals. These services will expose the students in Gujarat at a young age to the scholarly world and enhance their research skills. The second most important service construct to the students is the "Computer Facilities". The students want updated computers, reliable network and assistance on the use of these equipments. The integration of ICT into higher education is receiving wide acceptance. These technologies influenced tertiary education where lecturers are no longer the only source of information.

The integration of "Computer networking" into the education process "promotes student autonomy, increases classroom equality, and help students develop a critical learning perspective" (Warschauer, Turbee and Roberts 1996). Further Andreson (2000) and Nixon, Beattie, Challis, and Walker (1998) argue that the relationship between teaching and research is highly influential. The research generates an added dimension to teaching and allows the development of a collaborative relationship between lecturer and students within a learning community. The Gujarat higher education serves an increasing number of students and with the physical and financial constraints imposed on both the faculty and the students which challenge the delivery of quality education these technologies together with modern well equipped libraries would assist the Gujarat higher education sector efforts to shift from teacher centred approach to a learner centred approach, which would consequently ease the burden of providing quality education with limited resources and overloaded faculty. The students rated the importance of the three remaining services constructs starting with "University Facilities", "Teaching; learning and Advising" and last with "Assessment". The students aspire for education that is relevant and broadens their horizons. They want lecturers who know their subjects well and are capable to advise them academically, who also have a clear and consistent assessment criteria. The students' expectations could also be influenced through enhancing the university image through

media outlets such as education expos, offering scholarships for distinguished students and financial aid programs.

The results revealed that the students in Gujarat based universities are very satisfied with the service level. The most satisfactory service constructs are “Library Facilities” and “University Facilities”. The students perceived the service level of “Assessment” and the service level of “Teaching, learning and Advising” similarly. The students perceived the service construct “Computing facilities” as the least satisfactory among the service constructs presented to them. The students overall perceived satisfaction with the service level is in parallel with the results from the students perceptions of the five constructs. The students' satisfaction in the service quality will contribute to retain the current students, attract future students, enhances the chances to engage current students and the university alumni in positive word of mouth recommendations for prospect students and maintains the universities positive image (Jiewanto et al 2012). Stakeholders across the higher education spectrum are advised to focus on factors that are not only related to the educational process if they wish to maintain their academic status and differentiate themselves from other institutions. The students' satisfaction with their university not only contributes to the university's image and reputation it contributes significantly to the students' educational achievement (El Ansari & Oskrochi 2006).
The analysis of the service quality in Gujarat based universities revealed that all five service constructs were negatively disconfirmed. The most negatively disconfirmed components are the “Computing Facilities” followed by “Learning, Teaching and Advising”. The three remaining service constructs were ranked starting with “Library Facilities”, “Assessment” and “University Facilities” which was the nearest service constructs to expectations. The results from service quality are interpreted as the students not receiving the same service level they expected from their universities.

The service quality is an antecedent to students' satisfaction therefore the universities are advised to improve the service level of the five components with special focus on the service constructs which require more attention than others. The “Computing Facilities” could be improved with more updated computers and printers. The facilities opening hours could be adjusted to be more convenient to the students. The staff should be trained, friendly and understanding of the students needs. The service construct “Teaching, Learning and Advising” is the second most unsatisfactory construct which warrants attention. This service construct could be enhanced with
adopting an education approach that develops the students' soft and hard skills. A special course which focuses on developing the students' soft skills, such as communication skills, team work skills, debates and problem solving skills could be integrated into the study program as an elective course. The university should encourage building links with professionals and experts from the local market. These professionals could be invited to present their work or scientific experience from a practical point of view and engage in direct discussions with the students. These opportunities will enrich the students' academic and practical experience, facilitates their transition to employment through enhancing their knowledge of the job market demands. The results also suggest that a more direct and transparent relation between the university management and the students is in need of

attentions. The university management should encourage direct and frequent communication channels with the students through students unions and other representative bodies. The students' suggestions and feedback should be taken into consideration when designing the universities plans; otherwise the gap between the university management and the students will increase. The universities are advised to conduct more focused
research on the service quality of the each of the service constructs in order to identify good practices and build on them and service areas that need further attention. A dissatisfactory service quality will negatively influence the relation between the students and the universities, which would affect the universities monetary and strategic interests.

The results revealed that the majority of the students in Gujarat based Universities are completely loyal to their universities followed by the second largest group of students who considered themselves as loyal to their universities. However one fifth of the students were found completely non- loyal to their universities. This percentage is reflected in the comment of one of the respondents who commented on the survey form with "Do we have any other options". When answering if they were proud of to be students of the respective university; one of the students commented with "only in front of students from other universities". Though the results seems to be encouraging however to have a fifth of the sample describing themselves as completely non loyal is not a small number. The sense of helplessness expressed in the students' comments warrens that the students attend the universities out of lack of choice or their inability to obtain their education elsewhere.
The students' loyalty to their university is very important to attract new students, and decrease the chances of students defecting to other institutions. The results from the students' loyalty analysis could not be interpreted in isolation from other elements in the study. The students' loyalty intentions and the students' satisfaction with the service level at their universities are strongly inter-related to each other. Student satisfaction is a significant determinant of positive word-of mouth recommendation, retention and loyalty (Temizer L., & Turkyilmaz A. 2012). In other words when the students are satisfied with the service quality at their universities they are most likely to recommend it to other prospect students. The correlation between the students overall perceived satisfaction and the students' loyalty is strong which means that enhancing the students' satisfaction would contribute significantly to enhancing the students' loyalty intentions. Yet a further investigation into the other potential factors such as the university image which might contribute to enhancing the students' loyalty is recommended.
The students' satisfaction and loyalty intentions are influenced by age and study level however gender did not have an impact in both cases. Studies have shown a strong relation between satisfaction and age (eg. Salanova, Agut, and Peiro 2005, Realo & Dobewall 2011). The students' overall satisfaction is highly correlated the students' loyalty intentions which is supported in the literature (e.g., Athiyaman 1997). The study revealed that the older the students the more they are satisfied and loyal. The students' satisfaction with the university determines their decision to persist pursuing their education at that university. Students tend to take the decision to transfer to other institutions normally during the first and second year of study. Studies show that not all students who enter a university have the intention to obtain the degree. The students' decision to finish their degree depends on several factors such as ability, aspirations secondary school grades and socioeconomic status (Astin 1977).

Students who choose to finish their education at the academic institution reflect their persistence and satisfaction with their academic choice. The universities should realize the importance of students' demographic attributes which influence their perceptions of the service quality. These factors should be taken into consideration when planning to enhance the students' satisfaction which would influence their loyalty and behavioural intentions.

Conclusion and Recommendations for Further Studies

While education in general and higher education in particular continues to play major role in the life of the Gujaratis; the current study shed light on the current service quality in Gujarat higher education. The study focused on several service quality aspects in higher education which are considered a priority by the students who are the prime customer of these services. The study also focused on students' perceptions of the current status of service in Gujarat based universities. The results call upon faculty, staff and the universities' administration to increase their efforts to meet the expectations of the students and meet their needs. The SERVQUAL gaps model and the survey instrument proved to be convenient instrument to be tested in an Gujarats educational context. The discrepancy in the students' expectations and perceptions reflects on service gaps from the university side. A more concrete research into the students' expectations as well as direct and frequent relationship with the students would tremendously enhance the university understanding of the students' needs and perceptions of the service level. These could be done through online surveys of the service level through the university internal network, suggestions boxes at all service encounters and frequent monitoring and benchmarking the service constructs. With modern technologies, these evaluations could be conducted at very low costs. The university employees and work systems should also be further studied to identify poor approaches. Employees who do not feel appreciated, who are overloaded with tasks, which have to work with poor support systems or simply not trained and empowered enough to carry the tasks will not perform well. These are the internal customers of the university, and the face which the students would build their impressions on when they recall their university life. The university should invest in them through updated support services, comprehensive empowering plan which enhance their skills and abilities as well as a management system which commends them for the work they do and help them overcome their shortfalls. Due to the physical and financial limitations; the study focused only on traditional universities in the Gujarat. Further studies should be conducted to include other post secondary education institutions such as private institutions; university colleges and community colleges both in Gujarat in order to form a more precise opinion of the service quality status in post secondary institutions in Gujarat.

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Economic Environment and Higher Education

(The Indian Scenario)

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Economic conditions, economic policies and the economic system are important factors that constitute education environment in a country. Prof. Francis Cherunilam in his book, 'Business Environment' has stated "economic conditions of a country, for example, the nature of the economy, the stages of development of the economy, economy resources, the level of income, the distribution of income and assets etc. are among the very important determinants of business strategies." Similarly, education strategies and environment are influenced by economic conditions and system of a country. Income of the people and their purchasing power influence the demand for education. In countries where investment and income are steadily and rapidly increasing, education prospects are generally bright and further improvement in new educational programme is possible.

The economic policies of the government influence education environment in the country. If import of laboratory equipment is freely allowed, in improves quality of education especially science education and research-oriented education. Education tie-up and collaboration with foreign universities will contribute to increase quality in the entire education spectrum. Exchange of students and research scholars from one country to another country also influences education environment. This type of exchange programmes are encouraged and funded by the University Grants Commission. Economic conditions o a country determines infrastructure for school and universities and other development-oriented activities.

The government policies on education will influence education environment. Government frames policies relating to students' admission, teacher selection and the administration o educational institutions. Economic policies and systems support as well as monitor educational institutions. There may be a perfect positive correlation between economic conditions of a country and growth of education sector. A substantial growth in education can be seen in developed countries and students of developing countries prefer to do their higher studies in developed countries.

Foreign universities are fastly entering in India to provide their educational services to Indian students. This is the outcome of globalization of education market. The entire functioning of foreign universities and Indian educational institutions are governed by the economic policies and economic system of the government of India. Trend in domestic trade, inflation, money supply, foreign exchange reserve, growth of industry, agriculture and service sector, external debts to GDP determine status of education and its prospects for education. Macro economic factors should be studies to access the prospects of education.

Tax revenue determines allocation to education to make more allocation for expenditure on education.

Reducing interest rate influence educational environment. Students' persuing higher services, medical and engineering education, come forward to get educational loans from public sector banks to meet their expenditure on education. Public sector banks should also encourage educational loans. Loans are also provided to educational institutions for constructing required infrastructure. Banks should be checked-in liberties to fix rational interest rates and lending policies for educational purpose. This will make better scope to student and educational institutions to avail required financial assistance.

Increase in foreign exchange reserve will make the students to get required foreign exchange to go abroad for higher studies. Foreign exchange policies are, to some extent, liberalized today. Students can get nearly appropriate foreign exchange from foreign exchange dealers for pursuing higher studies abroad. They have to submit documents relating to higher studies abroad. In India foreign exchange reserve is on increasing trend. Indian professionals earning abroad can open foreign currency accounts in Indian banks. Similarly, inflation rates will influence cost of education.

Low inflation rate will contribute to reduce cost of education. Cost o education constitutes expenditure incurred for lodging and boarding, tuition fees and other fees, books and other amenities required for education. Of late, the cost of education is increasing. Privatization of education is being encouraged. It makes cost of education very high. Generally, it is assumed that cost education is cheaper in Indian than the neighboring countries. Cost of education in south India is cheaper than the education centers in North India. Cost of education varies rom discipline to discipline, and institution to institution. Scholarships are provided by the government to meet the part of the cost of education to selected students based on government policies. Cost of education depends on policies of the government. After privatizing the education sector, governments frequently interfere to fix various types of fees to be collected from students of professional education. In some cases, judiciary also interferes for fixing fees to be collected from the students of professional education curriculum. Curriculum improvement is one of the factor contributing to increase in cost of education. Requirements of modernized infrastructural needs and also modern teaching methods using educational tools and gadgets cause increase in the cost of education. Diversified courses, and various means and methods used to promote competitive skills of students also add to the cost education. Since service sector constitute about 70% of the market transactions in the developed world, the economic value of higher education, which holds the key to services, has registered a sharp increase in recent times. This has given rise to two developments: a tendency to restrict access to higher education by making it dearer

and a tendency to commercially exploit it by selling it at a premium in the market. The United State is estimated to make a profit of seven billion dollars a year by providing its educational wares abroad. The potential of global market in higher education through the provision of degree and diploma courses is estimated to be worth a billion dollars. This indirect market in higher education in the form of intellectual property right and services provided by the elite class in education sector is worth many billion dollars.

The World Bank has taken note of the special value of higher education in the modern knowledge economy. According to a recent study conducted by the bank in 192 countries, physical capital and natural wealth account for only 16 to 20 percent respectively by the total wealth of these nations. Human capital account for rest of 64% of the wealth! Infact, there is a direct correlation between the extent of human capital and economic prosperity. Human Capital in developed countries like Germany, Japan and Switzerland is as high as 80% of the total wealth, while that of the least developed sub-saharan countries as low as 50%. Higher education is one of the important inputs for the development o human capital. The percentage of population undergoing higher education in the relevant age-group of 18 - 23 is invariable higher in developed countries than in developing countries and underdeveloped countries. The World Bank has estimated that enrolment ratios in higher education average 51% in the countries that belong to the organization of Economic Co-operation and Development, compared to 21% in middle-income countries and 61% in low-income countries. Experts hold that an enrolment ratio of 20% in higher education is a sine - qua - non for economic development in the modern world. The Executive Summary of the World Bank Document Higher Education: the Lessons o Experience (1994) states: "Higher Education is of paramount importance for economic and social development. Institutions of higher education have the main responsibility of equipping individuals with advanced knowledge and skills for positions of responsibility in government, business and other professions." Despite the above facts, the World Bank document puts forward the argument that the developing countries should not invest their scarce resources in higher education! The argument is supported by setting off primary education against higher education It is claimed that primary and secondary education have greater claims to subsidies as compared with higher education since the rate of social return on investment in the former is comparatively greater than that of investment in the latter. To quote: "Indeed it is arguable that higher education should not have the highest priority on incremental public resources available or education in many developing countries, especially those that have not achieved adequate access, equity and quality at the primary and secondary levels. This is because of the priority that countries attach to achieving universal literacy: because the social rates of return on investment in primary and secondary education usually exceeds the return on higher equity

because they tend to reduce inequalities."

The Government of India, through its own official document and reports sponsored by it, has duplicated the World Bank's double speak. The discussion paper - Government Subsidies in India, issued by government of India in May 1997 sought to differentiate between merit goods and non-merit goods on the basis of their externalities or social returns. The paper suggested that cutting down the subsidies on non-merit good could reduce fiscal deficits. It brought out the fact that in 1994-95 subsidies for services provided by the central and state governments amounted to 14.4% of the GDP, of which 5.6% was spent on education. It was proposed that the extent of total subsidies be reduced by 50%. Education beyond elementary level was classified as non-merit good because here the benefits of subsidies accrue primarily to the recipients. On the contrary, the benefits of providing elementary education spread well beyond the immediate recipients. Therefore, it was argued that the subsidy on higher education br reduced from the existing 90% to 25% over a period o five years. In justification of the stand, it was also pointed out that the largest population is not actually benefited by the subsidies. Since public spending is financed by public tax, subsidizing higher education would actually amount to subsiding the rich by the poor!

The same arguments are put forward with lesser internal consistency in the Report on a Policy Framework in Education, more popularly known as Ambani-Birla Report, submitted to Prime Minister's Trade and Industrial Council in April 2000. The report is full of praise for the educational achievements in Sweden and China where almost the entire expenditure on education, even at the level of higher education, is met by the Government. Sweden spends 8.3% of its national income on education. Yet, the report only recommends the Indian government to spend 3.15% of the GNP on education, which is far below 6% recommended by Kothari commission and less than even 3.8% being spent by Government. The expenditure on higher education should be shared between the private and public sector in the ratio of 60.40%. Despite labeling higher education as a non-merit good, Ambani - Birla report recommends the Government to subsidise courses like History, Geography and Philosophy for which there is little commercial demand, leaving courses like Management Studies, Information Technology, Biotechnology in the self-financing sector to be exploited by educational entrepreneurs. The government's role in this for-profit area could be restricted to providing guarantee for student's loans to ensure risk-free profitability. The report welcomes investment not only by domestic entrepreneurs, but by foreign investors as well. There could be either foreign direst investment (FDI) or investments through franchises in India. There could be private universities and private franchises extending 'World-Class' education at 'World-Class' rates. The logical fallacies are glossed over in the eagerness to promote business. At one stage, it is stated that the entry of foreign

entrepreneurs is necessary to ensure the quality imperatives of Indian higher education. At another stage, it is argued that the courses offered by the Indian universities will be of great demand abroad because many foreign countries offer only sub-standard education. Thus, it is felt that Ambani - Birla report is only for an ineffective apology for profiteering in education.

Rejecting the World bank's estimate of higher Education as a non-merit good, the policy document 'Higher Education in the Twenty First Century: Vision and Mission' framed by the World Conference on Higher Education (1998) has categorically stated that higher education should be considered as a public good, the benefits of which can not be fully estimated in monetary term alone. The Framework for Priority Action for change and development of Higher Education recommends that the States, including their governments, parliaments and other decision makers should establish, where appropriate, the legislative, political and financial framework for reform and further development of higher education, in keeping with terms of the Universal Declaration of Human Rights which establishes that higher education shall be accessible to all on the basis of merit. No discrimination can be accepted, one can not be excluded on grounds of race, gender, language or age because of any economic or social distinctions or physical disabilities. The same position was stated in an earlier UNESCO Document: Policies for Change and Development in Higher Education (1995) which maintained: State and society must perceive higher education not as burden on federal begets but as a long term domestic investment in order to increase economic competitiveness, cultural development and social cohesion.

The argument that middle and upper income group appropriate most of the subsidies in higher education is no justification for denying subsidies in education. It is estimated that only about 14% of the Indian households can afford to meet the full cost of the higher education of their wards. In a country where about 40% of the population still lives below poverty line and majority of the population belongs to the socially backward sections and lives in villages where facilities for higher education is lacking, all avenues for upward mobility for first generation learners will be denied if subsidies for higher education are withdrawn, Moreover, it has been pointed out that 70% of the subsidies in higher education reach the target groups. This is contradictory. Such contradiction and inconsistencies can be eliminated if the Government takes firm and pro - masses stand.

Issues And Recent Trend In Human Resource Development

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Abstract

The paper throws light on the concept of HRD, need for HRD and the definition of HRD. It also discusses the important issues and recent trends in Human Resource Development. The paper underlines the fact that the success of any HRD programme depends on the involvement of all the employees where an employee perceives himself as a developer of his/her subordinates. In the end of paper certain conclusions have been drawn as food for thought for the HRD personnel.

Introduction

In the last few decades Evidence has been accumulated to the effect that Human Resource Development has become vital in all spheres of life more so in organizational life. In today's fast moving and sometimes unpredictable organizational environment developing human resource is a major responsibility. There is an increase pressure to sustain and improve employee motivation due to competitiveness in the field as also the price one has to pay to result-oriented, efficient and motivated employees. These pressures arise from different sources and a variety of measures – such as globalization, liberalization, innovation and change in science and technology, all of which demand higher level of skills and responsibilities from employees themselves.

An effective HRD system is the most important element in organizational effectiveness which, not only ensures existing performance, but also helps in long term survival and growth of the organization. HR is a precious asset and HRD is the means to attain better organizational effectiveness. HRD has to deal with both the factors - which prevent growth, and lead to growth.

Singh (1992) observed that in the context of HRD, organization can be broadly divided into two types – professionally managed companies and entrepreneurial companies. According to him, professionally managed companies recruit _ high fliers from prestigious institute of management. Everybody is amazed at the "'putting power" of such organizations. The level of motivation in these companies is sustained by the offer of better salary and perks. Generally, these companies have tremendous established training and HRD facilities and management systems and procedures to look after the development of such recruits; and, companies spent considerable amount of money and energy on these activities.

On the other hand, the entrepreneurial companies use entirely different instruments. These companies cannot afford to employ MBA's from premier institutions. They recruit ordinary graduates or post- graduates or MBA's from ordinary institutions. Company owners take personal care to train, coach, lead and guide them so that, over the years, they become good managers. Despite having limited resources for training and HRD their systems and personal care they bestow do produce results. In the long run their systems convert ordinary men into extra-ordinary ones. This is real HRD as rightly perceived by Singh.

In the opinion of Nadler, the term "HRD" was first applied in 1968 in George Washington University. It was used in Miami at the conference of American Society for Training and Development in 1969. According to Nadler, the term was gaining more acceptance during the mid- 1970's, but many used it as a more alternative term than "Training and Development". In the opinion of some management professionals, Japan was the first country to begin with HRD practices. "Better People, not merely better technology, is the surest way to a "Better Society, is the most popular belief in Japan (Basu 1987). In the opinion of Uday pareekh, the term was first used in India in 1972 by the State Bank of India (Bansal 1991). By the late seventies and early eighties this professional outlook on HRD caught on to a few PSU's namely BHEL, MUL, SAIL, IA, AI, LIC and IOC. Larsen and Tourbo and TISCO were the first two organizations in the private sector to give importance to HRD. C-DOT, Eicher, Crompton Greaves, Sundaram Fasterns, Sundaram Claton, State Bank of Patiala, Canara Bank and other organizations also joined the bandwagon during 1980's.

Need For Human Resource Development

Organizations ought to be dynamic and growth oriented to be able to sustain the competitive environment. This is possible only through the competence of Human Resources. Employees in an organization need competence (Knowledge, Attitude, Skill, Habits and Values) to perform tasks. In absence of continuous development of human capabilities among the employees, an organization is not likely to achieve its objectives. Therefore, competent and motivated employees are necessary for organizational survival, growth and excellence. Even organizations which have reached the saturation point in terms of growth need to sharpen and develop employee's competencies and capabilities continuously to operate in the changing environment. HRD is neither a concept nor a tool, but is an approach using different personnel systems, depending upon the needs and priorities of the organization. The assumption is the firm belief in human potential and its development, by providing a suitable and congenial environment.

According to Rao (1986) in the organizational context HRD is a process in which the employees of an organization are continuously helped in a planned manner to:

- acquire or sharpen their capabilities that are required to perform various functions associated with their present or expected future roles;

- develop their general capabilities as individuals, to discover and exploit their inner potentials for their own or organizational development purposes;

- develop organization culture in which superior- subordinated relationships, team work and, collaboration among sub-units are strong and contribute to the professional well being, motivation and pride of employees.

From the above, it is evident that HRD is a continuous process and its ultimate goal is to maximize individual effectiveness as well as organizational effectiveness.

HRD is the responsibility of both line managers and HRD specialists. It is a cooperative and massive effort in the organization. Pareekh and Rao (1981) have identified four basic partners of development viz. :(i) The self (the individual); (ii) the immediate superior (boss); (iii) HRD department and (iv) the organization. Rao & Pareekh also observed that there are six units in an organiza9tion which are concerned with HRD. These are (i) person (employee); (ii) role; (iii) dyad; (iv)team; (v) inter-team & (vi) the organization. The effectiveness of one unit (foci) will contribute to the effectiveness of others. Thus HRD is an integrated process and cannot be thought of in isolation. According to Rao, major interventions of HRD are: (i) Performance and potential appraisal; (ii) Career Planning; (iii) Training; (iv) Organization development; and (v) Reinforcement. HRD interventions may vary from one organization to another depending upon their needs, based on diagnostic studies. For example, role analysis was the core of its HRD programme in IOC, whereas SBI started with performance appraisal as the first intervention of HRD.

HRD Issues and Present Trend

HRD deserves increased attention of both managers and academicians. HRD in organizations is required to effectively cope with change in the environment, meeting the expectations of the new breed of employees, and to adjust with the rapid changes in technology as rightly perceived by Dayal (1989). In the future the sustained leadership of organizations is likely to depend on the success of their HRD efforts or programmes. The major issues and trends in the field of HRD are as follows:

1. HRD and Other Functions

Organizations need to state clearly the purpose of their HRD programme,

the philosophy behind it, and its ultimate objectives. In many organizations mission and HRD objectives are not clear. In such organizations HRD efforts do not succeed, leading to role ambiguity and overlapping in performing personnel and HRD functions. If the two functions are different then the distinction should be clearly spelt out. On the other hand, if HRD is merely a change in terminology, then the position should be clearly so stated. Further, difference between HRD and OD in Indian companies/organizations should be clearly defined. Employees get confused with OD and HRD terminologies which need to be clarified.

2. HRD and Productivity

In the opinion of Nadler & Wiggs, a development has little or no effect on productivity. It can have an impact on morale and make employees feel better about their job. In an organization when development opportunities are provided to its employees as a part of HRD programme, employees probability get the message that management view them as more than just extensions of machines, and such efforts do not have direct bottom line results. Similarly, education cannot bring immediate effect on productivity. Training, the component of HRD however, is highly focussed on productivity. The learning from the training helps a lot to overcome current job difficulties and produce different performance levels which ultimately lead to increase in productivity.

One of the major problems faced in this area is how to measure the effectiveness of HRD efforts on productivity. Every organizations, whether large or small, is concerned with productivity. Productivity is sometimes confused with production. Until there is agreement in the organization on how input/output is to be measured, it will not be possible to measure a productivity index. And without this base line, it is difficult to evaluate the impact of HRD on productivity.

3. Organization Culture

Nadler defines culture as the habit and customs that people develop to cope with change. According to Schein "culture is a pattern of basic assumptions – invented, discovered, or developed by a given group as it learns to cope with its problems". Both the definitions have a commonality.

Culture of an organization influences its HRD climate. The factors which

contribute HRD climate are – (i) top management style and philosophy, (ii) personnel policies, (iii) HRD instruments and systems (iv) self-renewal mechanisms, (v) attitudes of personnel and HRD staff and ; (vi) commitment of line managers. Issues relating to these areas are crucial.

4. HRD for Workers

Rank and file employees constitute 70 per cent of the workforce in most of the Indian organizations. People particularly working in the lower echelons have fewer opportunities of growth. Their jobs are relatively a monotonous one with narrow promotional avenues. In the decade of the 80's major HRD focus was on growth and development of executives except a few organizations like TISCO, TELCO etc; gave substantial importance for up-keeping the workers through the quality of work life programmes.

The modern workers are comparatively educated, more articulate and demanding. Therefore, the capability of workers needs to be continuously harnessed to compete with the fast changing business environment. The workers are required to posses multi skills so that they don't suffer from redundancy. If the workers are neglected they will feel alienated and become social liability.

Conclusion

HRD helps individuals, groups, and the entire organization in becoming more effective. It is required because people, job and organizations change continuously to meet the environmental needs. The effect of HRD becomes visible and stronger only when the line managers start accepting and internalising their own role. Without the involvement of line managers HRD efforts in an organization may not create a chain effect in the system. There should be congruity between the belief and the actual HRD practice. HRD should be directed to all cadres of employees.

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Study Of Emerging Trends In Global Pharmaceutical Industry

Abhay Desai

The global pharmaceutical industry revenue is forecasted to reach an estimated $1,226.0 billion by 2018, with good growth over the next five years (2013-2018). The industry is expected to register growth led by aging population, changing lifestyles, hectic daily activities, unhealthy eating habits, increasing incidence of chronic diseases across the entire global population providing growth opportunities for the industry players.

Where is the global pharmaceutical industry today?

Medical progress: The research-based pharmaceutical companies have made enormous progress in the treatment of many illnesses, including infectious diseases, childhood diseases, and some types of cancer, cardiovascular disease, diabetes and hepatitis. Looking back over the past century, it is clear that medical science has made breathtaking advances. This is shown by the fact that life expectancy has risen enormously to around 80 years, compared with 55 in the late nineteenth/early twentieth century even if it is still not possible to treat the causes of most diseases. Cost of research and development is becoming increasingly expensive. Despite the enormous progress that has been made, developing a new drug has still become a very challenging task. Only one in 10,000 substances screened eventually becomes a fully fledged product that can be used to treat patients. It takes 10 to 15 years to achieve that. That costs an average of $ 1—1.5 billion for each drug brought into the market (including the cost of failures). The cost and complexity of research have increased substantially. At the same time, political pressure on prices has risen and that has evidently increased the business risks. Those are the main reasons for the progressive consolidation of the industry. Fifteen years ago, the ten largest companies commanded 25% of the global market; today their market share is over 50%.Twenty years ago the European American pharmaceutical markets were roughly equal in size. Today the US market is twice the size of the European market and far more profitable than Europe.. This ongoing trend has serious implications for research and innovation. For some time now, European companies have been channeling more than half of their research spending to North America, whereas twenty years ago Europe accounted for two thirds of global pharmaceutical research. The United States has a clear edge both in terms of “output”, in other words, the number of new active ingredients for pharmaceuticals, and in terms of “input”, that is, R&D spending (app. USD 20 billion are spent on drug development in the United States every year).

The global generic drug market should grow at a compound annual growth rate of 15% over five years to be worth just under $169 billion in 2014, according to a report from BCC Research.

The generic drug industry covers the marketing and sale of medication containing the same active ingredients and dosages as brand-name drugs manufactured by the pharmaceutical industry. Drugs can be prescribed under their chemical name without specifying a particular pharmaceutical brand or company. A key benefit of generic drugs is that they usually cost a fraction of the price of brand-name drugs, as much as 80% to 85% less according to the US Food and Drug Administration. For example, Glucotrol, a drug used in the treatment of diabetes, represents a monthly cost to patients of between $42 and $84 for 10 mg tablets; however, the drug's generic version, Glipizide, costs up to 10 times less at between $4 and $8 per month.

Global projections

Older population is expected to double by 2050.

a) World population aged 65 and older in 2012--- 546 million.

b) World population aged 65 and older in 2050----1.56 billions

c) Total population in 2012----------7 billions

d) Total GDP (GLOBAL) ----------83 TRILLIONS

e) GDP per capita in 2012---------- $ 12500

f) Population growth in 2012----------1.1%

g) Global GDP growth in 2012---------- 3.3%

Between 2002 and 2050, world average life expectancy is expected to rise from 66 to 77 years with the number of those over 60 years old increasing by 333%.

What will the future bring for the global pharmaceutical industry?

There are a number of fairly clear trends that are likely to have a significant impact on the pharmaceutical industry.

Trend 1: Demographic change

The industrialized countries — viz , Japan, Europe and the United States — will increasingly be confronted with the phenomenon of an ageing population and it will have consequences for all areas of life.

Today, there are about 546 million people worldwide over the age of 65 (that is 8 % of the global population). This figure will virtually double by 2020 & more than triple by 2050 (to 17% of the global population). In the USA alone, there will be more than 80 million people over 65. Globally, about 400 million people will be over 80. The ageing population represents a growing burden on healthcare systems (in fact, on all social security systems). Per capita healthcare spending is highest among the over-65s because the death rate is highest in this age group.

Chronic illnesses have already replaced infectious diseases as the main cause of death (in absolute terms). The more the number of older people, the higher the risk that they will suffer from a chronic illness.

Eg-Cancer According to US studies, people over 65 are 17 times more likely to get cancer of the colon (intestine) than younger people. Given the demographic trend, progress in medicine and disease prevention will take on a more significant role in a bid to alleviate the problems caused by rising demand for care for the elderly. The aim of medical research is to ensure that people do not simply live longer, but that they remain healthy and independent for as long as possible so they are not dependent on care. That is also the goal for the development of innovative drugs. Eg- Alzheimer's disease is one of the main reasons why many old people need care: Potentially, it could affect any old person. . Ageing is still the only known risk factor for this disease. Alzheimer's is still incurable. However, lot of research in this direction will bear fruits in years to come. Emerging countries like China and India face a completely different situation. Rapid economic and population growth will drive up demand for health care. India is likely to have a larger population than China within the next 40 years. The Indian middle class is already larger than the entire population of the United States. With rising disposable incomes, 50-60 million Indians can now afford private health insurance. The industry therefore needs a presence in these growing markets.

One major reason why healthcare spending is increasing worldwide is that GDP is rising. As the population becomes more affluent, they would be willing to spend more on healthcare, and this will not change in the future.

A second major factor is the trend towards “personalized medicine”.

Trend 2 : More individual medical treatment

One major problem is that drugs often do not have the expected effect. We all know that and most of us have probably experienced it either ourselves or in our families. The Pharmaceutical Research and Manufacturers Association of America estimates that about USD 100 million are wasted every year in the United States alone because patients take drugs that are ineffective or have serious side effects. There are many reasons for this. The most common is that the drugs are not taken, either because people forget, or because they are afraid of side effects. Alternatively, the medication may react with other drugs being taken at the same time. However, there is also another possible reason. The biological make-up of everyone is different. Today, we know that that is due to genetic differences. Although 99.9 percent of genes are the same in all people, the remaining 0.1 percent can contain differences in the DNA sequences that store genetic information.

It is therefore desirable that doctors could treat the patients more effectively if the difference between the patients could first be determined with the aid of a lab test, enabling them to prescribe the most effective — personalized — medicine for each of the patient. eg breast cancer. Breast cancer remains the most common type of cancer in women: one in ten will contract this disease sometime in her life. There are different types of breast cancer and based on the type a genetically engineered drug (monoclonal antibody) can be given. This means if the type is identified before treatment, the patient can be given more specific, personalized treatment.

As the first DNA chip test in the world to receive regulatory approval, it represents a pioneering new discovery. This test can be used to show whether people metabolize a drug faster or more slowly as a result of their genetic make-up. The chip provides information that can result of their genetic make-up. The chip provides information that can aid the selection and dosage of a range of medications (for example, anti-depressants, psycho pharmaceuticals, painkillers and drugs to treat cardiovascular disease). Personalized genetic analysis enabling doctors to investigate the complete genetic make-up of their patients and then prescribe drugs and treatments specifically intended to minimize side effects is still a very distant prospect. However, even complete genetic mapping will never enable the DRs to answer all medical questions.

Trend 3: The rising importance of diagnostics — plus pharmaceuticals

A third trend is the huge progress made by modern diagnostics, especially in combination with pharmaceuticals. Diagnostic procedures will continue to gain importance, allowing the earliest possible identification of predispositions for certain diseases and more effective

treatment. Increasingly, this will include disease prevention. At present, laboratory services account for an average of just 1% of overall healthcare costs. However, these services and the information they provide have enormous potential to raise the efficiency of healthcare as a whole, allowing optimization of the remaining 99% of spending.

This potential needs to be tapped. The prospects for patients suffering from cancer would improve considerably if diagnostics were used more widely than in the past. More than 90 percent of cancer patients could live five, ten or more years with current methods of treatment if the disease were identified earlier.

The fourth trend is biotechnology.

The modern biotechnology is a key technology of the 21st century. Together with automation and information technology, it is starting to open up new perspectives for all areas of the life sciences, and especially for medicine.

Highly potent, selective biopharmaceuticals have already proven very successful, especially in the treatment of cancer. In future, the treatment selected will depend on the genetic pattern of the tumor.

Knowledge of the genetic differences between patients can also aid the development of new drugs. If the scientists know which patients will not tolerate a potential new medication, or will not respond to treatment, these patients can be excluded from clinical trials at the development stage. That would enable them to pursue a number of projects that have previously had to be halted due to side effects or low average efficacy even though excellent results were obtained in specific patient groups

The fifth trend is enormous health care costs

The cost of health care will be phenomenal & beyond the reach of a common man in the developing countries. Even in the developed world, people would be grumbling about the notorious health care costs & phenomenal rise of the cost of drugs.

In almost all the developing countries the governments will have to intervene and they will regulate & control the ever increasing cost.

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Lobbying as a Non-Market Strategy

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Abstract:

The business environment in India has undergone a transformation, breaking free from the shackles imposed by the erstwhile 'licence raj' prevalent during the pre1990s. Despite the improvement in the overall business climate, the Government and the official machinery still plays a major role in deciding the fate of businesses. In this decidedly complex environment, the process of regulation, legislation of new laws of business and the modus operandi of auctioning of public resources has come under increasing scrutiny by civil society, public watch groups, media and perhaps more importantly the Judiciary. Much of these developments can be somewhat explained as typical of a society undergoing a transition from a socialist mindset to that of a more modern global business mindset. In such 'work-in-progress' situations, companies are often left with the choice of engaging in both market and non-market strategies to handle business challenges. This paper endeavours to understand some of the issues of companies making such choices.

Introduction

Facing competitive pressures is what Business enterprises are essentially built for and in a free market culture winners are often feted and praised as an example for others to emulate. In the marketplace, a firm battles the demands of environment, changing customer needs, large competitors and fresh upstarts; shifts in technology and product usage, lifestyle characteristics amongst others. It also handles 'non-market' competition which is much different from 'Market' (Spulber 1994; Baron 1996). The elements of non-market competition are in terms of handling challenges posed by regulations, legislative interpretations, shifting goal posts in policy and administrative diktats.

In order to handle such non-market situations, many companies resort to Lobbying as an integral part of their unwritten Corporate Strategy. After all, a company is finally judged by how well it has created shareholder value and the question as to whether it used a market or a "nonmarket" strategy is only a matter of debate (Spulber 1994; Baron 1996). Whereas market strategies involve decisions such as product positioning and pricing, nonmarket strategies are actions taken by the firm in its political, regulatory and social environments for the purpose of increasing firm value (Baron 1997, 1999). This it does by lobbying legislators or regulators, litigating a case in court, and making political contributions.

Manufacturing consent through lobbying is serious business. There is also a thin line between 'promoting' consent through strategic public relations and 'ensuring' it through lobbying the powers that be. The history of India is also that of conflicting ideas between a

bewildering array of cultural, linguistic and religious beliefs, presenting themselves to an open minded audience always willing to consider alternatives to existing beliefs. This fertile environment gave rise to a long line of Saints, Philosophers and transformational icons like the Buddha, Mahavira, Shankara, Nanak and many others. Proselytising has been a strong Indian tradition over several millennia, often churning out legends, myths, puranas and folk tales of glories, disasters, morality and victories by generations of sages and rishis.

In ancient India, famous for its oral literature of smriti(what is told) and shruti(what is heard), the role of perception in moulding opinions was perhaps at its best. In the modern context, the first recorded campaign of structured multipronged promotions was the campaign carried out to promote tourism through the Great Indian Peninsular (GIP) Railways(Keval J. Kumar, 2011, C.K.Sardana, PIB). The post Independence fervour of nation building influences also impacted the nascent PR practise and it was often argued that PR must be viewed as a development tool geared towards the nation's socio economic progress and building a case for citizen-centric public relations system(J.V.Vilanilam, 2011).

The rise of informed consent in India

The withdrawal of restrictions on business and the opening up of the economy in the early 1990s also saw the rise of PR consulting agencies. Till then the practise of Public Relations was largely a Public Sector domain though there were pockets of excellence in the private and Multinational companies. Public Relations in the PSU was and is practised as a combination of employee welfare, community development, internal information sharing and motivation with a superficial blend of event based or financial results oriented external communications(Keval J.Kumar, 2011)

In the decade after the 90s the number of listed companies in India grew so did the growth of power Brands especially new age companies, domestic Indian transnationals, export related stalwarts and fastly growing companies from sectors that were being fuelled by public resources like mining and telecom. The new PR agencies, both advertising offshoots and stand alone professional consultants, grew at a time of booming media growth in media channels and publications. The explosion of social media and venture capital funded start ups also contributed to this growth. The professional Lobbyist in the garb of the PR person was ready to roll.

The arrival of the Lobbyist

The professional PR agency person as a Lobbyist came into searing limelight with the leak

of tapes of telephone conversations between a Consultant and a range of public figures and media personalities. The case is today known as the Niira Radia Tapes episode. The controversy loomed large enough to reach the door steps of the Supreme Court where the deliberations are still one.

During the entire Niira Radia episode, the media kept referring to the lady as a PR Consultant. Was Ms. Radia a PR consultant or a Lobbyist? While the lines between Lobbying and Public Relations Advocacy can often blur, there is an essential difference. Public Relations work towards promoting consent and image enhancement for an organisation while Lobbying is a process that aims at affecting legislation. There are a few similarities but very important differences. The process of lobbying also involves methods of Public Advocacy. In a survey of 222 registered lobbyists in United States it was found that they, like many public relations professionals, do think about their role as a form of advocacy(Kati Tusinski Berg, PRSA, 2009)

Academic literature describes lobbying as a function of public affairs, a function of management(Heath and Cousino,1990) specialised area of public relations (Toth,1986) or as a function of public affairs that builds and maintains relations with government primarily for the purpose of influencing legislation and regulation (Cutlip, Center, and Broom 2000).

But is there an element of conniving and destabilisation of the rule of law and justice in ensuring equitable treatment to all? The reaction of the media on the tapes and the 2G case opened with much ferocity and the question asked was 'Who is this PR person Niira Radia?' Sunit Arora writing in The Outlook(Dec 6th, 2010) says, “The Radia tapes are a superb lesson in dialectology, loosely the study of speech styles. PR lady Niira Radia's accent varies in practically each conversation with politicians, business leaders, bureaucrats and top TV and print editors. She's matter-of-fact in some, husky in others; she's abusive in Hindi while speaking about some journalists to her staffers, she's assured while explaining extremely technical matters to business honchos, retired bureaucrats and editors; and has a schoolgirl-like British accent while conversing with Ratan Tata.”

The conversations emanating from the taped telephone records showed how the political process was being influenced upon by the corporate chieftains right under the nose of either cohabitating or gullible media professionals. While much of the issues on whether the act was legal and the nature of conversations as a criminal liability, is being examined by the Supreme Court of India, our interest lies in whether in this case, the line was crossed somewhat with the a 'non-market strategy' impacting a firm's long term interests.

Lobbying as a global trend

It is often cited that Lobbying is common in United States and many developed countries but that is not completely true. Lobbying is still one of the most controversial activities in a modern democracy(Kaushiki Sanyal and Harsimran Kalra, 2013). While it provides governments with valuable policy-related information and expertise it may put public interest at risk if the activity is not transparent. No wonder it is regulated in US, Canada, Australia, Germany and Taiwan, bringing in a degree of transparency.

Lobbying by industry was common in India, especially as a legacy of the Union Budget being seen as an annual 'Business Event'. Before, the Union Budget moves to the TV studios we had the spectacle of the legendary Nani Palkhivala giving his Union Budget analysis to hugely attended public gatherings. In the Union Budget, a stroke of the Ministerial pen could transform a sector, through less taxes(for growth) and concessions(for struggling industries), often deciding the fortunes of many industries.

Before the budget, the Government of the day was often brought under pressure by representations from Trade bodies and Industry Associations asking for beneficial treatment(in the larger interests of the nation and customers!), less tax, subsidies and free land allotments. But these are examples of collective action and there are quite a few examples like the Mazdoor Kisan Shakti Sangathan (MKSS)—a coalition of non-governmental organizations—for the Right to Information Act. Others who have campaigned for Protection of Women from Domestic Violence Act, 2005 or even the Anna Hazare led campaign for the establishment of the Lokpal, an anti-corruption body. But much of these activities are out there in the open, presenting themselves to both public support and criticism.

The debate of such efforts, the pros and cons of the issue are often opened up in public platforms. Universal access to information on expenses and details of communications with policymakers would give impetus to more debates in the public domain. A shift to lobbying as a means of engaging with the legislative process would further the ideals of a participative democracy. In complex technologically evolving industries such collective action in lobbying helps legislators understand the shifting contours of the business.

But such lobbying is often conducted away from the public eye, unless of course a scandal breaks out. The thin line between ethical and unethical practices also differentiates between good PR practices and Lobbying. When lobbyists engage with the Government it is about influencing decisions but when they start interacting with Mediapersons in trying shape social agendas it often becomes a dangerous liaison(Firodia,2011) in which the credibility of the media stands exposed(Nandini Sahai, MICCI, 2011).

The experience of Indian companies lobbying in the United States may have helped shape their domestic strategy. Public records with the US House of Representatives reveal that at least 27 Indian companies have, over the years, spent thousands of dollars on lobbying in the US – for issues ranging from visa rules to exploring the US oil and defence markets. Some of the prominent Indian companies using consultants for lobbying were Ranbaxy(Patton Boggs) Tata Sons(Cohen Group), Reliance Industries(Barbour, Griffith & Rogers), Wipro(Melanie Carter-Maguire), Nasscom and the Gems & Jewellery Export Promotion Council(Shantanu B, 2012)

Since the seminal work of Olson (1965), the literature on lobbying has focused on the ability of individuals and groups in collective action (Bendor and Mookherjee 1987, Sandler 1992, Sandler and Tschirhart 1980). While the collective action literature has much to say about the amount of lobbying that occurs, it is less informative when it comes to the organization of lobbying. The only conclusion that can be made from the literature is that less lobbying occurs when there are collective action by industry groups.

In the political circles in India, lobbying is still denounced as an euphemism for bribery (R.S.Prasad, 2012).There is even a Bill pending to regulate lobbying introduced in the Lok Sabha by K.N.S.Deo which goes on to define lobbying as "an act of communication with and payment to a public servant with the aim of influencing legislation or securing a government contract". In India, due to a somewhat proven record of official patronage and crony capitalism, the act of Lobbying is seen as a potentially corruptive act.

Informed Decision making

Administrative decisions and the legislative process do not exist in a sterile atmosphere. In India, one of the few feedback system available for legislators is the Standing Committee process which has its advantages and limitations too. More often the Standing Committee process is unable to understand the intricacies of laws and depend on the official bureaucratic system for interpretations. For law makers to craft legislation an in-depth feedback of the consequences, pitfalls and lacunae should be fully available. Lobbyists play an important role in bringing in such varied opinions. While such processes should be enriched by a spectrum of opinions and interests it should be equitable to ALL.

The U.S. has regulated lobbying through the Lobby Disclosure Act in 1995 which mandates compulsory registration, disclosure and periodic reporting by lobbyists. It includes both lobbyists working inside organizations and third-party lobbyists. Lobbyists must submit to Congress bi-annual financial activity reports, which identify the lobbyist and clients. The reports also must disclose issues and draft laws that were the subject of lobbying and an

estimate of expenses and are also available to the public for inspection(Anish Dayal, WSJ, 2013).

But if lobbying has to be transparent why do corporates commissioning lobbying efforts baulk at full disclosures? If lobbying in India is still largely in the dark do those who have commissioned such efforts without full disclosures have a right to privacy of those very transactions(Prof Madabhushi Sridhar, NALSAR).

In the Radia Tapes controversy, Ratan Tata, has taken the issue to the Supreme Court to prevent the disclosure of the full tapes in the public domain claiming protection by invoking Article 32 to secure Article 21 for the right to privacy. Being a beneficiary in 2g spectrum allocation, he has asked the Supreme Court to direct an iron veil of secrecy around Radia Tapes to prevent its leaking to public through the media to protect his privacy. The protection for private information from disclosure is not available if there is overwhelming public interest in disclosure. Overweighing public interest in non-disclosure should be proved for not considering public interest in disclosure.

Public interest is also about whether the Lobbyist is using people's motives and weaknesses to further the client's brief. This was the subject of a famous showdown on TV between two mediapersons, Manu Joseph, Editor, The Open and Barkha Dutt, News Head, NDTV when they sparred on the propriety of Journalists crossing the redlines by engaging with Lobbyists. Should journalists cultivate 'sources' in Lobbyists masquerading as PR persons? Where does good journalism stop and lobbying begin? But Manu Joseph also acknowledged that "...the only person sticking to her brief was Nira Radia"(News Laundry, 2012).

Adding to this was another observation(Sunit Arora) who said "The tapes raise disturbing questions we all have to answer. Who is this woman who can speak to the "highest and mightiest" in this country in this way? From where does she draw her power? And what does it tell us about our society?"

Conclusion

The real choice for a firm is to decide whether the application of a non-market strategy makes sense in the long run. It is quite understandable that Corporates who embark on lobbying do so out of sheer compulsion, especially when a well entrenched and politically connected competitor is able to garner significant gains doing the same. It may also be argued that prohibiting the right to lobby goes against free speech. But this right should be available to everyone, which in a developing society such as ours, is not true for all.

The right to influence, to advocate, to petition – either for a private company or a non-profit consumer entity – has to be a level playing field. The 'Right to Lobby' should not turn into the 'Power to Lobby' when the financially endowed are able to 'price' and 'provide value' to 'Privileged information'. In India, unlike developed countries, the regulatory framework is still 'work-in-progress' with many official regulators grappling with complex business and technology situations.

There is also a resultant phenomenon of retired government officials moving to lucrative positions at lobbyists firms, giving them an unfair competitive advantage. The power to influence gets concentrated in a few rich hands, drowning out the voice of those that can't pay adequately and are destined to live in the margins of the system.

Even legislative and regulatory decisions based on objectivity and 'public interest' can be questioned when one or even two companies gain an advantage through sheer happenstance. Perhaps one company is able to take quick advantage of the changing rules and gain first mover advantage through sheer effort. This successful result may be seen as 'spoils' rather than as genuinely produced profits. Charges of 'crony capitalism' can be both genuine or through hindsight.

However, there is a case for Collective Action theory in lobbying which is more preferable to individual lobbying efforts, since the benefits are uniformly felt on the entire sector. There is also a significant difference between a Public Relations professional and a professional lobbyist.

The PR person essentially focuses on building or protecting the long term image of the company or an organisation. On the other hand, the lobbyists' main task is to advocate the cause of his client through all means available to him. Coming on board as a 'facilitator', he has a lesser stake in the long term impact of an organisation's success. It is quite possible that the modus operandi of the lobbyists is questionable and the entire gains may be nullified through Judicial action.

The focused PR professional would be looking at the long term impact any action by a company would have on its goodwill and brand. By resorting to the quick fix of 'lobbying', it is very easy for a 'well known company', with a long 'illustrious history of service and good corporate governance', to be perceived as a recipient of 'ill gotten benefits'. The damage to the image would be incalculable.

Strategic Public Relations(as a market strategy) is about communicating in a way that generates goodwill and mutual benefit, based on the merits of the situation. Lobbying(as a

non-market strategy) on the other hand is focused on obtaining a series of financial benefits through desired outcomes. The material gain for the recipient of Lobbying successes is different from gain in goodwill for Public Relations campaigner. Also in a Public Relations campaign, the ultimate arbitrator is the Media where both good and bad cases are argued and stand exposed to public opinion. In the field of Lobbying there is no such medium standing in the way of judging the outcomes.

The success of any profession can be ascertained by the opinions of its target audience. The changing efficacy or effectiveness of Lawyers can be, to a certain extent, be gauged by the measured opinion of the litigants. A Corporate Communications professional is ultimately beholden to the satisfied client. A Lobbyist is beholden to material gains for the client. The difference is minor in context but stark in terms of consequences.

In India there is always a temptation to observe the nature of business through the prism of our socialist past. Being a country with meagre resources, we cannot afford an environment where public debate and decisions for the 'greater good' is destabilised by well heeled lobbyists, who can take advantage of their access and connections to disorient the legislative and regulatory system. What we need is a transparent and futuristic regulatory framework, especially one that would provide an equitable and fair environment for corporates to pursue their business in a level playing field. Where none has an unfair advantage and the lobbyists will then be seen out there in the sunlight!

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New Bank Licensing Guidelines 2013

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We are overbanked in Metropolitan & urban areas, whereas most of the semi-urban & rural areas are still deprived of banking facilities. In view of this the New Bank Licensing Norms cannot be eased by the RBI as most of the new licenses are targeting the Metro population and the rural areas will remain unbanked. Any licensing policy for new Bank should be with a condition that they should start from rural business. Otherwise stringent norms should be followed.

New Bank licensing norms should not be eased by RBI. We had witnessed in the past many private banks being merged with public sector banks due to their failure for obvious reasons. While the Government is pondering over merger of PSU banks to form bigger banks to compete with International Banks in the world, issuing fresh licenses will only help forming more smaller banks in size. Instead of opening of more branches in the unbanked area by the existing banks would meet the purpose.

Licensing norms once diluted, no bank would accept the strictness later on. Moreover it would be the hard money of the general public which would be on stake so the stringent measures/requirement put in place by the Central regulating Bank i.e. RBI would help in evolving a Banking system which would strengthen the economic growth of the general masses with inclusive Banking and the Country at Large. Hence new bank licenses need not be issued.

The RBI said one of it's discussion papers favours 'continuous authorizations' of new banks and explores the possibility of converting large urban co-operative banks into commercials banks to impart dynamism to the banking system.

Couple of years back, there were talks of making mergers of the existing banks, to make them stand up against big multinational banks. Do not know, why this change of approach by the authorities! Why unnecessarily have multiplicity of banks? We already have enough of them.

The Reserve Bank of India favours liberalization of bank licensing policies which otherwise could hinder entrance of new players and have an adverse impact on the economy and consumers.

“Regulators need to ensure that their regulatory stance does not create barriers to the entry or exit of institutions or result in unwarranted costs to the economy and consumers,” the RBI said in its annual 'Trends and Progress of banking in 2012-13' report.

“Instead regulation should impose restrictions on institutions is such a way that it does not cause a moral hazard problem,” the report said.

It could be noted that the RBI is in the process of issuing new banking licenses. It has received as many as 26 applications for bank licences on the close on July 1.

The RBI is likely to issue new banking licences in January 2014.

“However, this is not to undermine the need for ensuring sufficiently stringent entry norms to prevent the entry of banks of questionable soundness or competence, since their proliferations could undermine public confidence of the overall integrity of the banking system,” the RBI said.

The RBI had issued guidelines for new banks on February 22 2013, and came out with clarifications in the first week of June 2013.

In the past 20 years, the RBI has issued licence to 12 banks in the private sector in two phases. Ten banks were licensed on the basis of guidelines issued in January, 1993, and two in the second phase.

The guidelines were revised in January, 2001, based on the experience gained from the functioning of these banks and fresh applications were invited. Kotak Mahindra Bank and Yes Bank were the last two entities to get banking licences in 2003-04.

ANALYSIS OF INDIAN PHARMACEUTICAL INDUSTRY

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Atharva Institute Of Management Studies.

Abstract

The global Pharma industry 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 has led to a 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.

This paper talks about characteristics of the Indian pharmaceuticals market that has make it unique. First, branded generics dominate, making up for 90 per cent of the retail market. Second, local players have enjoyed a dominant position driven by formulation development capabilities and early investments. Third, price levels are low, driven by intense competition. While India ranks tenth globally in terms of value, it is ranked third in volumes. These characteristics present their own opportunities and challenges. But IPI has to evolve to confront the current situation and if possible new avenues for growth have to be explored. In this paper attempt has been made to do strategic analysis of 3 selected companies namely Cipla, Dr. Reddy's Lab and Glenmark.

Introduction

India is now among the top five pharmaceutical emerging markets globally and is a front runner in a wide range of specialties involving complex drugs' manufacture, development, and technology. IPI is ranked 4th in volume terms and 11th in value terms globally. There are 24,000 players (around 330 in the organised sector). Top 10 companies constitute 1/3rd of the market. Sector grew at 11.8% during FY13 (67,864 cr.) The R&D by top 5 companies is around 5% to 10% of revenues. IPI's GDP contribution was 1.71% of GDP in 2011. The pharmaceutical industry in India meets around 70% of the country demand for bulk drugs, chemicals etc. The industry is expected to touch US$ 35.9 billion by 2016. Key products of IPI are Medicines Medical equipments, Surgical goods, Operation accessories, Injections, Bulk drugs

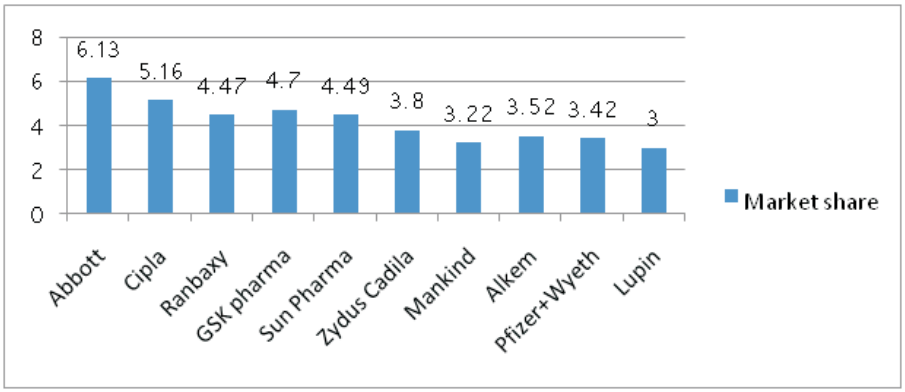
Research Objective And Methodologies

- To examine the trends in the profits of the pharmaceutical industry in India and do the SWOT analysis of IPI.
- To study the various components of IPI.
- To study the various strategies adopted by 3 major Indian pharmaceutical companies.

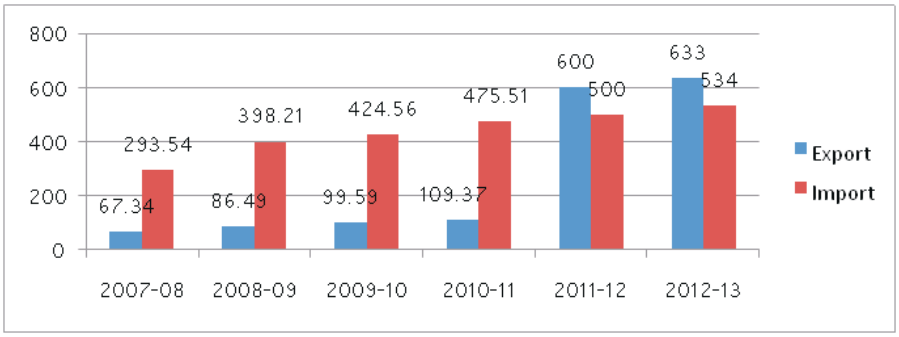
The data for this research paper has been taken from secondary sources, Articles, Research papers, Study conducted by organization of pharmaceutical Producers of India.

Observation And Analysis Of Data

Key Players In Indian Pharmaceutical Industry



Export and Import ($ In Billions)



Government regulation

! Due to relation of pharmaceutical industry to health of individual this industry is highly regulated and because of this over the past year, there have been interventions at the regulatory level such as compulsory licensing, FDI policy, pricing policy, marketing code and regulatory approvals, which will require careful considerations.

- Laws Pertaining To Manufacture And Sale Of Drugs: The object of the Act is to regulate the import, manufacture, distribution and sale of drugs. Under the provisions of this Act, the Central Government appoints the Drugs Technical Advisory Board to advise the Central Government and the State Governments on technical matters arising out of the administration of this Act.

- The Drugs and Magic Remedies (Objectionable Advertisements) Act 1954: This Act is meant to control the Advertisements regarding drugs. The Drugs and Magic Remedies Act prohibits a person from taking part in publication of any advertisement referring to any drug which suggests use of the drug for: a) the procurement of miscarriage in women or prevention of conception in women; and b) the maintenance or improvement of the capacity of the human being for sexual pleasure.

- Drugs and Psychotropic Substances Act, 1985:This is an Act to consolidate and amend the law relating to Narcotic DrugsIt's aim is to make stringent provisions for the control and regulation of operations relating to Narcotic Drugs and Psychotropic Substances and for matters connected there with Narcotic Drugs and Psychotropic Substances Act, 1985.

Indian Government Initiatives.

However Indian government has been taking various initiatives to promote the development of IPI.

- It is proposed to extend concessional basic custom duty of 5% exemption from excise duty to six specified life-saving drugs.

- Probiotics (bacterial infection)-reduce basic custom duty from 10% to 5%.

- Basic custom duty reduced on soya products to address protein deficiency among women and children's.

- In the Union Budget 2013-14, investment allowance of 15 per cent on new plant and machinery has been allowed. The allowance is expected to increase investments in new projects while simultaneously providing tax benefit to the industry.

  · Jan Aushadhi Campaign' has been initiated by the Department of Pharmaceuticals, Government of India, in collaboration with the State Governments, by way of opening up of Jan Aushadhi Generic Stores in the Government Hospitals by way of supply of generic medicines through Central Pharma Public Sector Undertakings, to make available quality generic medicines at affordable prices to all.

SWOT analysis of Indian pharma industry

Strength

- Cost competitiveness due to lower labor cost and production cost.
- Well-developed industry with strong manufacturing base.
- Well established network of Laboratories and R & D infrastructure for new drug discovery and development.
- Access to pool of highly trained and skilled scientists, both in India and abroad.
- Strong marketing and distribution network in domestic as well as international market.
- India is second largest country in terms of population in world with rich biodiversity.
- Expertise in reverse engineering and development of new Chemical process made Indian pharmaceutical industry as one of the strongest generic industry.

Weaknesses

- Low investment in innovative Research & Development.
- Lack of resources to compete with MNCs for New Drug Discovery Research and to commercialize molecules on a worldwide basis.

- Lack of strong linkages between industries and academia.
- Lack of culture of innovation in the industry.
- Low per capita medical expenditure and healthcare spend in country.
- Inadequate regulatory standard.
- Production of spurious and low quality drugs tarnishes the image of industry at home and abroad.

Opportunities

- Significant export potential to the developing as well as developed countries.
- Licensing deals and collaborations with MNCs for New Chemical Entities and New Drug Delivery Systems.
- Providing marketing operations to sell MNC products in domestic market.
- India can be niche player in global pharmaceutical R & D by developing world class infrastructure.
- Contract manufacturing arrangements with MNCs.
- Potential for developing India as a centre for International Clinical Trials.
- Increasing aging world population.
- Increasing incomes and buying power of people especially in rural areas has opened the great opportunity for Indian pharma companies. Around 70% of the total population of India is residing in rural areas.
- Growing awareness for health and increasing spending on health.

Threats

- Product patent regime poses serious challenges to domestic industries unless it invests in R & D.

- R & D efforts of Indian pharmaceutical companies hampered by lack of enabling regulatory requirement. For instance, restrictions on animal testing out-dated patent office.

- DPCO puts unrealistic ceilings on product prices and profitability and prevents pharmaceutical companies from generating investible surplus.

- Exports effort hampered by procedural hurdles in India as well as non-tariff barriers imposed abroad.

Components of pharmaceutical industry
Generic drugs

A generic drug is identical -- or bioequivalent -- to a brand name drug in dosage form, safety, strength, route of administration, quality, performance characteristics and intended use. Although generic drugs are chemically identical to their branded counterparts, they are typically sold at substantial discounts from the branded price. According to the Congressional Budget Office, generic drugs save consumers an estimated $8 to $10 billion a year at retail pharmacies. Even more billions are saved when hospitals use generics.

Active Pharmaceutical Ingredients – API

Active Pharmaceutical Ingredients are portions of any drug, which are active. Thus, depending on the drug's administered dosage, the reactions and results differ. Certain drugs are comprised of more than one kind of API.

Any drug is composed of two components or aspects. The first is the actual API or Active Pharmaceutical Ingredients, which is the central ingredient. The second is known as an excipient. This refers to the substance inside the drug or tablet. If it is in syrup form, then the excipient will be the liquid that has been used. Thus, excipients are the inactive or inert substances present inside a drug while the Active Pharmaceutical Ingredients is the chemically active substance, which is meant to produce the desired effect in the body.

Abbreviated New Drug Application (ANDA): Generics

An Abbreviated New Drug Application (ANDA) is an application for a U.S. generic drug approval for an existing licensed medication or approved drug.

An Abbreviated New Drug Application (ANDA) contains data which when submitted to FDA's Center for Drug Evaluation and Research, Office of Generic Drugs, provides for the review and ultimate approval of a generic drug product. Once approved, an applicant may manufacture and market the generic drug product to provide a safe, effective, low cost alternative to the American public.

ANDA approval is a pre-requisite for marketing generic products in the US. According to a report by Centrum Broking, Indian pharma companies bagged around 40% of all Abbreviated New Drug Approvals (ANDA) approvals from the US Food and Drug Administration (FDA) between January and July 2013.

Clinical Research

Clinical research is about finding the best way for patients to receive medical care. The NIH defines clinical research in three parts: a) patient-oriented (research involving interaction with human subjects), b) epidemiologic and behavioral, and c) outcomes and health services research. In each of these cases, researchers are looking to study how to improve health.

Clinical Trials includes clinical trials, which are studies that evaluate the effectiveness and safety of medical devices or drugs. These studies are conducted according to a formal protocol, which defines what kind of patient can participate, when and how much treatment is given, what is being measured, and the overall duration of the study.

Clinical Trial Phases: Clinical trials progress in phases, moving toward use for patient care after the drug or device has been thoroughly studied for effectiveness and safety. The phases of clinical trials, which each new treatment must pass to be introduced into the market include:

1. **Phase I:** Researchers test a new drug or treatment in a small group of people for the first time to evaluate its safety, determine a safe dosage range, and identify side effects. (healthy volunteers)

2. **Phase II:** The drug or treatment is given to a larger group of people to see if it is effective and to further evaluate its safety.

3. **Phase III:** The drug or treatment is given to large groups of people to confirm its effectiveness, monitor side effects, compare it to commonly used treatments, and collect information that will allow the drug or treatment to be used safely.

4. **Phase IV:** Studies are done after the drug or treatment has been marketed to gather information on the drug's effect in various populations and any side effects associated with long-term use.

Research Designs Used in Clinical Research

There are numerous research designs used for clinical research, including descriptive, exploratory, and experimental studies.

· Descriptive Research makes observations about patients or health-related conditions. Usually, this research includes a small sample of patients and intensively studies them to gain insight into the subject of interest. Examples include case-studies, qualitative research, or surveys.

· Exploratory Research examines patients or conditions that have not been extensively studied. Exploratory research looks to clarify or define a problem. Often, relationships or associations are looked for in order to better understand a disease or disorder. For instance, a study may discover a relationship between lifestyle factors and a particular disease. Examples include case-control studies, pilot studies, cohort studies, and historical research.

· Experimental Research involves comparing two groups of people. The purpose of this research is to examine the effect of the intervention. These designs, when randomization is used, are viewed as the "gold standard" in clinical research because the design allows researchers to rule out most, if not all, alternative explanations regarding their results. For example, a researcher may compare a group of patients receiving a placebo drug versus a group receiving an experimental drug. If the two groups are similar at the outset of the study, any differences at the conclusion of the study (e.g., improvement in the disease or disorder in the experimental group) can be attributed to the experimental drug.

Branded Generic

“Prescription products that are either novel dosage forms of off-patent products produced by a manufacturer that is not the originator of the molecule, or a molecule copy of an off-patent product with a trade name.” used by US-FDA and UK-NHS.

• In India, any non patented molecule with a brand name other than the innovator's name is termed as a branded generic.

- Developed countries developed countries -US, UK and Western Europe are generic-only markets.

Branded Generics vs. Generic-Only Drug

Indian Pharma market is predominantly a branded generics market which contributes around 90% of total sales, and only about 10% of the market constitutes non-branded generic drugs.

Branded Generics

Costly because of additional cost
High profit margin
Generic-only drug
Cheap
Low profit margin

Used as	Generic drug	Price	Branded Drug	Price
Painkiller	Paracetamol	Rs. 2.45	Crocin	Rs. 11.00
			Calpol	Rs. 10.70

Branded Generic – India

On 1st October 2012 order by the Indian health ministry instructs that Indian states should not licence drugs for manufacture and sale on the basis of their brand name and issue licences for generic rather than branded or trade names.

Impact of ban on "Branded Generics"

1. Substandard medicines flooding the market.
2. Decrease in foreign investment.
3. Impact on R&D for better and cheaper drugs.
4. Unnecessary process to register the branded generic after getting approval for the generic version.

Emerging Opportunities for Indi

Latin America

- Market Value of pharma market - $70bn
- Major markets – Brazil (34.8 billion)

and Mexico (13+bn).

- Improved access to health services and increasing life expectancy

Russia

· Russian pharma industry is directly dependent upon the bulk drug
· Since, 2007 drug consumption has increased by 26%
· Except, Pharma standard - Russian Co. all key players are MNC's.
· Indian players market share – less than 2%

CIS Countries

- CIS - Commonwealth of Independent States. CIS consists of 12 countries
- Contribution in Indian exports – 1.2%
- Dr. Reddy's, Ranbaxy, Wockhardt, Panacea Biotech, Lupin, Aurobindoa, Pirmal health care, Ankur Drugs and Pharma, Glenmark, Nectar lifesciences, Emcure, Claris Life Sciences, Divi's, Hetero, Arch Pharmalabs and Matrix have gained substantially by their exports to CIS nations.
- The CIS countries accounted for export revenue of Rs. 3017 crores during 2010-2011 which is about six per cent share when compared to the other regions.

Japan

- World's second largest pharmaceutical market
- Total pharma market - $90bn
- Major Problem - Lack of Transparency in regulations
- The world's second largest pharmaceutical pharmaceuticals market - Japan is yet to see major penetration from Indian pharmaceutical majors, especially in area of generic drugs.
- Except a few Indian players such as Lupin, none of the Indian drug makers are able to establish their presence in the $90-billion pharma market.
- In Japan, genericization has happened only to the extent of around 50 per cent while in the US, around 95 per cent of the market is generisized. So a large chunk of the market in Japan still comprises of patented products.

Africa – A Ripe Opportunity

- As per IMS – by 2020, market is expected to reach US$45bn
- Notable rise in healthcare spending and demographic shift – increasing no. of working age Africans

- India's exports to African countries especially Nigeria and Algeria have been on the rise during the past the one decade. At present Algeria is emerging as the second biggest pharma market in Africa with about $3 billion worth of imports and there is lot of potential for Indian pharma industry to explore and grab the opportunities in this market.

CIPLA

Company Profile

CMP (BSE) - Rs . **383.50** (As Of 12 th December 2013)

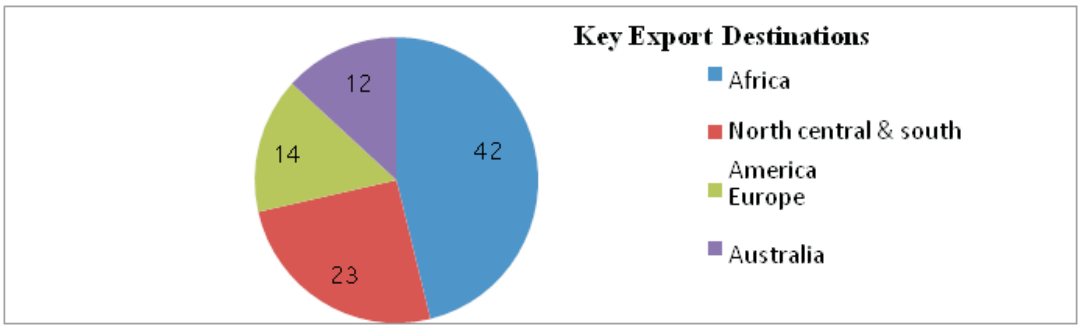
Market CAP (Rs In Millions) - **30,832.18**

P/E - **21.16**

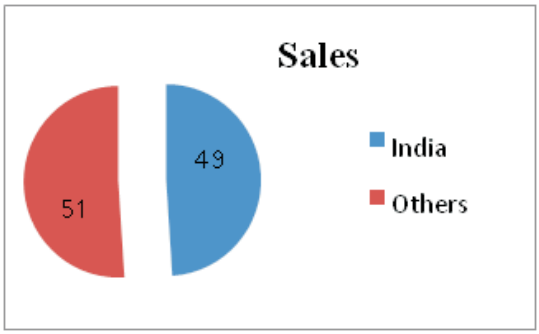
Industry P/E - **32.29**
EPS (TTM) – **18.15**

- Founded in 1935, by K A Hamied
- The Chemical, Industrial and Pharmaceutical Laboratories Ltd
- 30 manufacturing units in the country
- Sells over 2000 products in 65 therapeutic areas
- Market share of more than 5 %
- Largest suppliers of anti-malarial and anti-aids drugs
- World's largest suppliers of respiratory products
- 70% market share in domestic inhaler segment
- A strong presence in anti-infective, cardiac and cancer segments

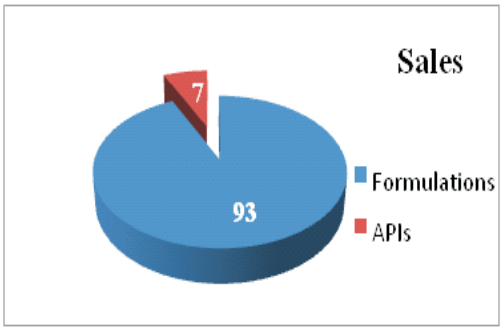
Key Export Destinations



Geographical Sales Breakup



Business Mix



Strategies

1. Consolidate International Business

Cipla, India's second-largest drug firm acquired South African distributor Cipla Medpro on 16th july and took an important step towards consolidating its international business that now makes up more than half its quarterly revenues. This is Cipla's first international acquisition in its 75-year-old history. Cipla's investments to improve its front-end presence in key markets, as it shifts from being a focused supplier to generic drug maker to marketing drugs itself and now its investments are on acquisitions, on the workforce, and on drug filings in developed markets (which result in higher R&D spending).

2. Entry in Biotechnology Segment

Cipla made an entry into the biotechnology space one in India and the other with China's Desano Group. Cipla acquired 40% stake in Goa-based Mab Pharma and a 25% stake Shanghai-based BioMab to consolidate its presence in the biotechnology sector, at an investment of about $65 million (Rs 3,000 million) in June 2010. Cipla and BioMab together invested $165 million to build plants in India and China to produce at least 12 biotech medicines. The company is planning to focus more on the chronic segments and entered into oncology & CNS areas recently.

3. Change in Product Mix

Antiretroviral (ARV) traditionally remained a significant growth driver for Cipla. But due to Contribution from low margin ARV business is coming down, the company is rationalizing its product mix by reducing its exposure to ARV drugs. ARV formulation accounted for 22% of overall formulation in Q1FY12. In Q4FY11, around 30% of total formulation was coming from ARV.

DR. REDDY'S LABORATORIES

CMP (BSE) - Rs. **2414.55**
(As Of 12th December 2013)

Market CAP (Rs In Millions) - **40,990.63**

P/E - **26.22**

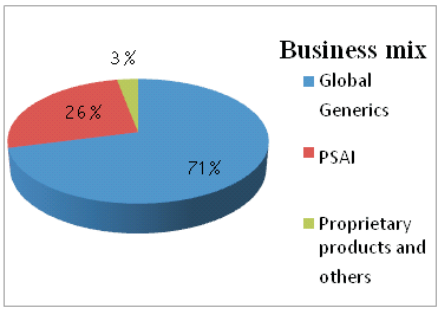
Industry P/E - **32.29**
EPS (TTM) – **91.89**

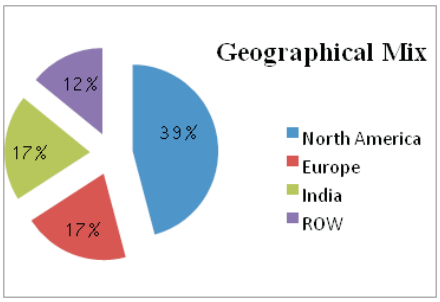
Company Profile

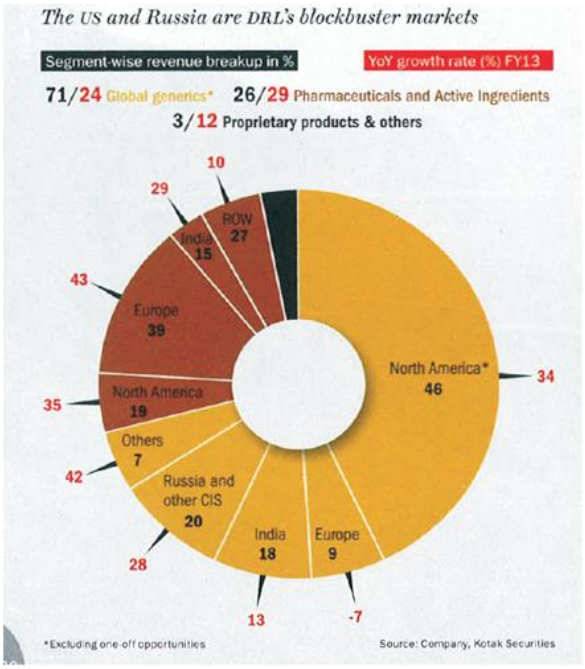
- Founded – 1984
- Founder- Anji Reddy
- Key people
- Chairman & CEO- GV Prasad
- Vice Chairman and Managing Director- Satish Reddy
- Headquarters Hyderabad, Andhra Pradesh, India
- Traded as NSE: DRREDDY
  BSE: 500124

- NYSE: RDY 2001: First 1st pharma company in Asia-Pacific to list on NYSE
- **Significant presence** (key brands) in gastrointestinal ailments, Cardiovascular disease, pain management, oncology therapies which account for 60% of its revenues and anti-infective drugs, Paediatrics and dermatology, Metabolic Disorders.

Revenue Mix







Strategies

1. Delinking drug discovery from the generics business in September 2005.

That's one reason India's drug makers have adopted a new strategy: spinning off their drug-discovery units as separate companies. On Jan 1, Ranbaxy Laboratories approved a spin-off plan. Dr. Reddy's pioneered the trend of delinking drug discovery from the generics business. The Hyderabad-based company set up Perlecan Pharma in 2005 for new drug discovery along with venture-capital firms ICICI Ventures and Citigroup Ventures. Some experts see these spin-offs as signs that Indian companies are doing what's necessary to make strides in new-drug discovery.

2. Focusing on building capabilities by acquiring overseas companies

In 2006, DRL paid $560 million for the German generic drug maker Betapharm, the largest buyout by an Indian pharma company. But acquisition did not create any benefit for DRL due to government litigations. While Betapharm was a failed buy, it did bring some valuable lessons. First, the acquisition made Prasad and Satish Reddy realise that

chasing scale is not always a successful strategy. So they started acquiring smaller companies that add to DRL's capabilities and stopped acquiring for scale.. The Octoplus buy is a perfect example of the changed focus, as is the 2008 acquisition of Dow Pharma's small molecules business in the UK and 2011's buy of GSK's penicillin facility in the US. While Dow Pharma augmented DRL's manufacturing and research capabilities in its custom pharmaceutical services business, the GSK business resulted in additional revenues through brands such as Augmentin and Amoxil.

3. Banking on biosimilars in 2007

Acquisitions aside, what may help drive growth in India over the long term is DRL's biosimilars business. Biosimilars are generic equivalents of biotech drugs, such as insulin, growth hormones etc. Globally, the biosimilars market is expected to cross $4-6 billion by 2016 from the current $2 billion. To tap into this potentially lucrative market, DRL entered into a partnership with Merck Sereno, a division of Merck, to develop and commercialise biosimilar products in oncology, primarily focused on monoclonal antibodies. Such an alliance allows DRL to mitigate the risks involved in developing a biosimilar — the cost is pegged at $100-200 million, with 70% going towards clinical development.

4. Spotlight on research

Another change at DRL is its changed focus on research. Back in 1993-94, Anji Reddy started a research arm at DRL, the first Indian company to do so. It is focusing on areas where the risk is lower and the translation from lab to commercial products is higher. When DRL started research in 1993, it chose diabetes and cardiovascular therapy as its areas of focus, given that India has the largest diabetic population in the world. But, given the huge costs and low success of its clinical trials, it has moved away from those two areas, into anti-infectives, pain management and dermatology. In addition, the company is now also looking at incremental innovation, which means taking an existing molecule and changing the way it is delivered. It currently has 21 proprietary products in the pipeline, of which six are in clinical development in the areas of pain management, psoriasis and migraine.

GLENMARK

Company profile:

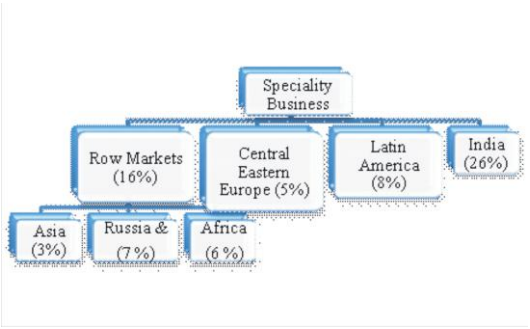
- Leader in India in the discovery of new molecules both NCE and NBE
- Pipeline of 7 molecules
- 7 Out licensing deals
- Business focuses on therapeutic areas
- Six manufacturing facilities

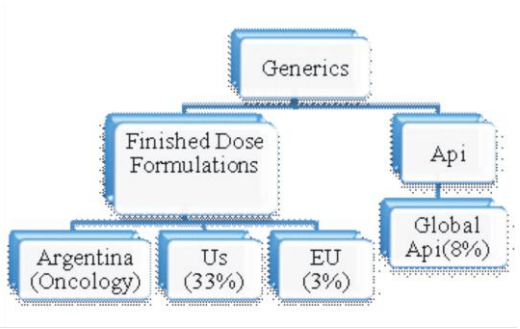
CMP (BSE) - Rs. **521.50**
(As Of 12 th December 2013)
Market CAP (Rs In Millions) - **14,132.39**
P/E - **33.83**
Industry P/E - **32.29**
EPS (TTM) – **15.41**

- Three research & development facilities dedicated primarily to drug discovery.
- In addition, the company has an R&D facility for formulations development & novel drug delivery system

TURNOVER

(%) – As a percentage to overall turnover of FY 2012





Strategies

1. Out-licensing

- A form of collaboration where another company takes over the development process for a candidate drug.
- Glenmark has actively followed the **strategy of out-licensing** its molecules in clinical development to large multinational pharmaceutical organizations. This outlicensing strategy has been successful so far with seven deals struck by the organization in the last nine years collecting USD 206 mn as upfront and milestone payments.
- Eg. The deal with Sanofi Aventis for GRC 15300 reaffimrs their commitment to cutting edge work in the area of drug discovery.
- Company recorded sales growth excluding out-licensing income of 28%. During the year under review, the India, ROW including Russia, US, Western Europe and API performed exceptionally well.
- With all the three regions i.e. India, ROW and US which contribute around 75% of the overall revenue performing well recording growth in excess of 30% respectively

2. Drug Discovery

Glenmark's ground-breaking **drug discovery** effort is primarily focused in the areas of inflammation (asthma/COPD, rheumatoid arthritis etc.), metabolic disorders (diabetes, obesity, etc.) and pain (neuropathic pain and inflammatory pain).

- **Phase I:** In this phase, the drug or treatment is introduced into a small group of healthy human beings to evaluate its safety, determine a safe dosage range and identify its side effects.

Comparison

Parameters	Cipla	DRL	Glenmark
Origin	1935	1984	1977
Total revenue (in Rs. Millions)	84,320	116,266	50,188
Domestic Revenue FY2013	49%	17%	-
International revenue	51%	83%	-
Major market	Africa	North America	US & India
PAT FY2013 (Rs. In millions)	15,071	16,766	6,230
Market cap (Rs. In millions) (As Of 29th October 2013)	32,927.80	41,266.20	14,370.06
CMP (BSE) (As Of 29th October 2013)	411.60	2427.70	531.15
EPS (TTM)	19.69	67.76	16.57
P/E ratio	20.83	35.80	32.00

Strategies Comparison

Strategies	Cipla	DRL	Glenmark
Focus on innovation	✓	✓	✓
Entry in biotechnology	✓	✓	
Out-licensing		✓	✓
R&D focus	✓	✓	✓
Building capabilities by acquiring overseas companies		✓	
Drug discovery		Separated in 2005	✓

CONCLUSION

As rapid growth achieved by Indian pharma industry, the world is looking at India for front-end manufacturing solutions, contract research and machinery and technologies. India is on a major growth plan and the authorities are offering required facilities for the overall growth in the pharma industry. For example Andhra Pradesh, which boasts of 25 per cent of the country's pharma production, is planning major expansion by proposing two more SEZs for the pharma industry in the state to provide major boost to the exports of bulk drugs.

Looking at the speedy developments taking place in the industry at present the $18 billion industry is poised to grow manifold to $55 billion by 2020. But, industry (especially the ingredients and pharmaceutical machinery manufacturers) should be ready to face competition from China and other Asian countries.

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Market Research For A New Product Launch In Melasma Disorder

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Abstract

This study aims at new product launch in melasma disorder (darkening of skin and patches). It is particularly seen in women especially those who take oral contraceptive or Hormone Replacement Therapy (HRT). This disorder also occurs due to UV rays of sunlight.

In this study primary data is the first hand available information and the same is collected by the researcher from 50 respondents who were dermatologists. Secondary data is the readymade information available for the study which is collected through company manuals and other reports published on Internet. The aim is to find out the perception of dermatologists on the current drugs, their follow up therapy for the same and their expectations from new product in melasma disorder. The current drugs used for melasma causes irritation of skin and it is also observed that people suffer from rashes as well as redness of skin. Moreover the current drugs also take longer time to act.

Introduction

The project is of market research on new product launch in melasma disorder. Ajanta pharmaceuticals is marketing a triple combination (**Melerio**) in the treatment of melasma disorder. They wanted to find out the customers' response to Melerio.

Melasma is a condition in which areas of the skin become darker than the surrounding skin. Doctors call this hyper pigmentation. It typically occurs on the face, particularly on the forehead, cheeks and above the upper lip. It is particularly seen in women.

New formulation contains Hydroquinone which inhibits Tyrosinase Enzyme. It leads to inhibition of Dopa and Dopa Quinone which Creates Melanin (hypersecereton of melanin leads to melasma disorder). Thus hydroquinone acts effectively against melasma. The new formulation contains triple combination of Hydroquinone, Tretinoin, and Fluticasone. Fluticasone is steroid. It having following advantage:-

Advantage over mometasone:-

1)Mometasone combination brands are effective but safety is compromised due to chances of skin atrophy, telangiectasia.
2) Mometasone can't be given for longer duration. Whereas fluticasone can be given for longer duration up to 8 weeks.
3) Fluticasone has equivalent efficacy with better safety.

Advantage over fluocinolone:-

1) Fluocinolone is mild steroid as compare to fluticasone
2) Fluocinolone takes longer duration to clear
3) Fluticasone is mid potent steroid (8 times more potent than fluocinolone) and can have faster results in melasma.

Advantage over hydrocortisone:-

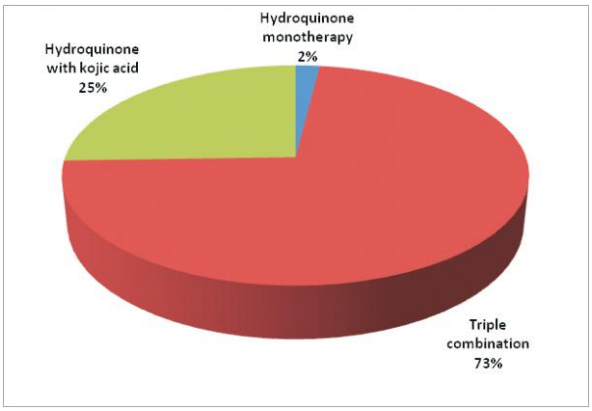
1) Hydrocortisone combination is follow up therapy of melasma not first line therapy.
2) Fluticasone triple combination is first line therapy.

Statement of problem:- The problem is to do market research for a new product launch in melasma disorder.
Objectives:- The aim is to find out the perception of dermatologists on the current drugs, their follow up therapy for the same and their expectations from new product launch in melasma disorder.

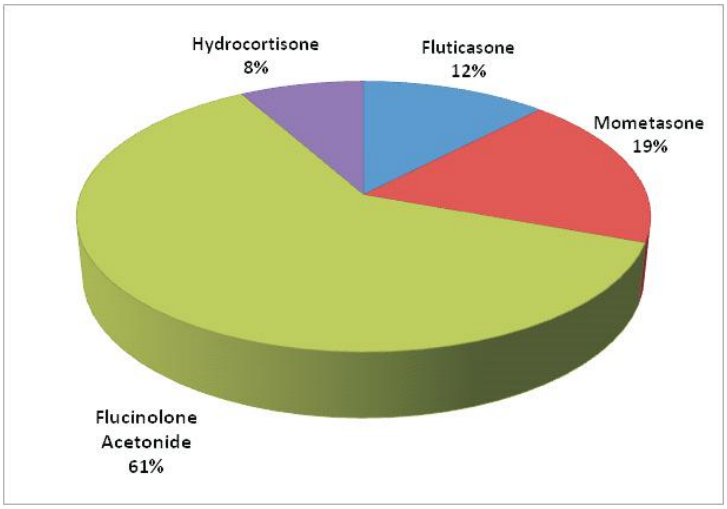
Research methodology:- primary data is the first hand available information and the same is collected by the researcher from 50 respondents who were dermatologists. Secondary data is the readymade information available for the study which is collected through company manuals and other reports published on Internet.

Data analysis:-

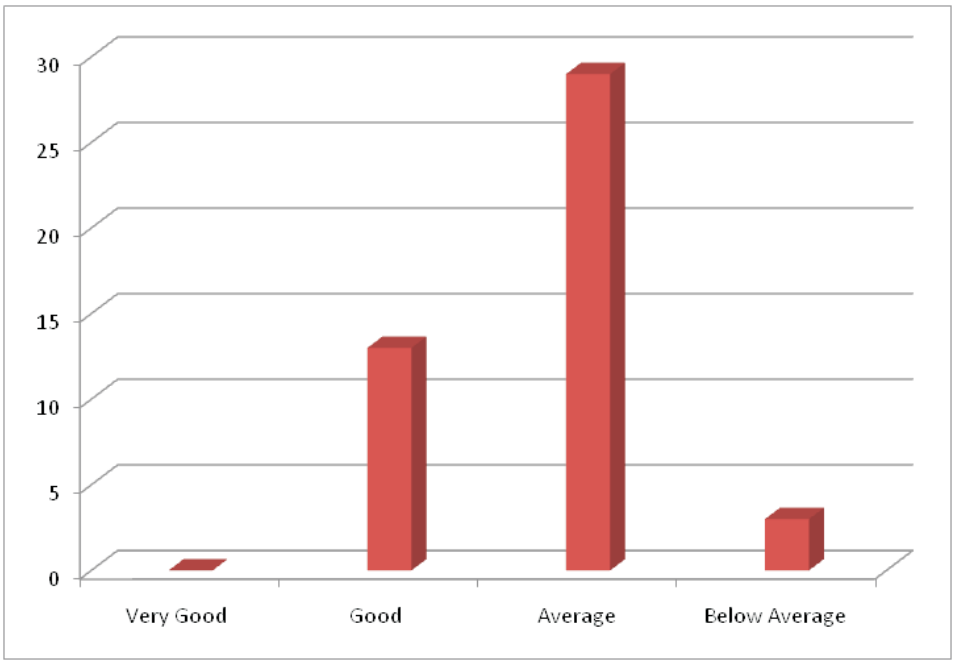
Q. Which is your first line therapy for melasma?



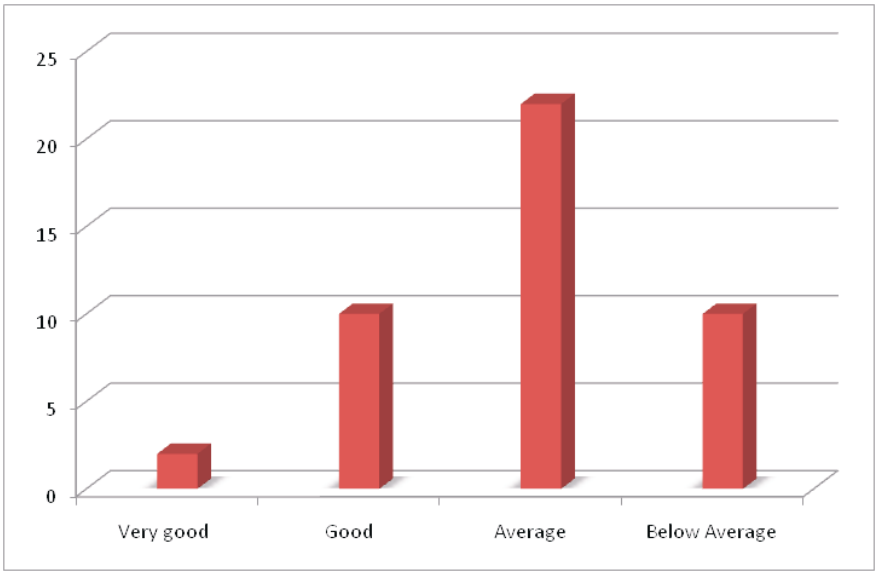
Q. whenever you use Triple combination which steroid would do you prefer?



Q. What is your opinion on efficacy of Liquorice extract over to hydroqinone?



Q. What is your opinion on efficacy of Tetra hydrocurcumin over to Hydroquinone?



Research Findings :-

The study reveals that
1)People who use current drugs to treat melasma develop symptoms like irritation of skin, skin rash as well as redness of skin. These symptoms are not common among all the patients however (15-20%) cases have reported such symptoms.

2) The dermatologists mentioned that they recommend kojic acid along with the triple combination to take care of these symptoms.

3) Kojic acid cannot be added to the triple combination since it is an unstable compound which can turn the cream brownish after having exposed to the sunlight. Moreover kojic acid takes only few days to act where as the treatment of melasma takes longer time (sometimes 4-6 months)

4) Fluocinolone is preferred by 61% dermatologists where as fluticasone is preferred by 12%

5) Fluticasone is 8 times more potent than fluocinolone however it is more expensive than fluocinolone. However the dermatologists advised me to keep the same combination in Melario since they are getting excellent results in melasma with the same.

6) Efficacy of ingredient like liquorice extract and Tetra hydrocurcumin over hydroqinone was found equivalent and below equivalent.

Recommendations:-

1) Advised the company to keep the same combination although 61% dermatologists were in favor of fluocinolone.

2) Recommend kojic acid as a second line therapy along with Melrio since few patients need symptomatic relief from skin irritation or redness of skin. The company can market plain kojic acid preparation.

3) Fluticasone should be aggressively promoted over fluocinolone because it is 8 times more potent than fluocinolone.

4) Hydroquinone should always be used in triple combination since its efficacy is much higher than liquorice extract and Tetra hydrocurcumin.

Conclusion:-

Ajanta pharma has decided to keep the same combination (Hydroquinone+Tretinoin+Fluticasone) under the brand name Melrio, since my market research led to a conclusion that this is the finest combination available in the market although fluticasone is little more expensive than fluocinolone. Moreover, fluticasone is eight times more potent than fluocinolone.

Appendix:-

Questionnaire For Melasma Therapy

1) How many no. of patients with Melasma you see in a week?
1] 0-5 2] 5-10 3] 10-15 4] More than 15

2) What is your first line therapy for Melasma?
1] Hydroquinone monotherapy 2] Triple combination 3] Hydroquinone with Kojic acid/ Glycolic acid/ Azelic acid

3) If you use Triple combination which Steroid do you prefer?
1] Fluticasone 2] Mometasone 3] Flucinolone acetonide 4] Hydrocortisone

4) What is your opinion on efficacy of Kojic Acid Formulation?

1) Very Good 2) Good 3) Average 4) Below Average

5) What is your Opinion on efficacy of Liquorice extract compared to Hydroquinone?
1) Very Good 2) Good 3) Average 4) Below Average

6) What is your Opinion on efficacy of Tetra Hydrocurcumin over to Hydroquinone
1) Very Good 2) Good 3) Average 4) Below Average

7) What is your follow-up therapy in Melasma?

_____

_____

8) Any recommendations you have for a new drug ?

_____

_____

Dr. Name: - ----------

Place: - ----------

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