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## **An Evaluative Study of the Attitude of Ayurvedic Pharmaceutical Industries in Nagpur Division towards Risk Management**

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**Abstract:**

Effective risk management strategies allow a firm to carry out its business activities in a sustainable way. The risk characterization is often done to identify a project's strengths, weaknesses, opportunities and threats. By planning for unexpected events, companies can be ready to respond if they arise. To ensure company's project's success, it is necessary to define how it (company) will handle potential risks so it can identify, mitigate or avoid problems when it needs to do. Moreover, successful project managers not only in a specific sector but all the sectors, including the Ayurvedic medicines sector, recognize that risk management is important, because achieving a project's goals depends on planning, preparation, results and evaluation that contribute to achieving strategic goals. In view of this a systematic study was carried out to know the attitude of ayurvedic pharmaceutical manufacturing companies of Nagpur region towards risk management. In this study, data was collected from ayurvedic pharmaceutical industries of Nagpur region by using a standardized research instrument i.e. a questionnaire. The study indicates that the ayurvedic pharmaceutical manufacturing companies of Nagpur region have a favourable attitude towards various aspect of risk and risk management. More specifically, it is evident that majority of companies give high importance to risk management to achieve company's objectives and also company's performance.

**Keywords:** Risk management, attitude, ayurvedic companies, performance

**1. Introduction**

Ayurvedic medicines are produced by several thousand companies in India, but most of them are quite small, including numerous neighborhood pharmacies that compound ingredients to make their own remedies. It is estimated that the total value of products from the entire Ayurvedic production in India is on the order of one billion dollars (U.S.). The industry has been dominated by less than a dozen major companies for decades, joined recently by a few others that have followed their lead, so that there are today 30 companies doing a million dollars or more per year in business to meet the growing demand for Ayurvedic medicine. The products of these companies are included within the broad category of "fast moving consumer goods".

Several small companies that have grown rapidly in recent years envision themselves as primary players in the Ayurvedic market. Besides, exports of Ayurvedic medicines have reached a value of 100 million dollars a year (about 10% the value of the entire Ayurvedic industry in India). About 60% of this is crude herbs (to be manufactured into products outside India), about 30% is finished product shipped abroad for direct sales to consumers, and the remaining 10% is partially prepared products to be finished in the foreign countries. However, owing to the different types of risks, these companies often face rejection of manufactured goods or other manpower of financial aspects related losses. Hence, in view of this, it was important to know the attitude of ayurvedic companies towards the risk management vis-à-vis different areas of operation.

**2. Review of Literature**

Hill and Hansen (1991) have reported that diversification by firms based in the pharmaceutical industry is primarily undertaken to reduce the risks associated with being dependent upon a technologically dynamic environment. However, Lin Yeoh (1994) has mentioned that variables like technological familiarity, product differentiation, competitive intensity and internal R&D skills have significant influence on firms' ability to manage risk. However, Pahud de Mortanges et al., (1996) insisted that the role of employees in the pharmaceutical industry is important for minimizing the varied types of risks prevalent in this sector. In addition to this Blau et al., (2000) stated that the effective means to manage the financial transactions along with the rate of return on the investment for the stakeholders is critical for risk management.

More recently, Lexchin et al., (2003) reported that funding of drug studies by the pharmaceutical industry is associated with outcomes that are often favourable to the funder thereby resulting in reduced risk. Whereas, Saunders and Cornett (2005) have stated that managing return and risk in modern financial institutions is central to its sustainable growth. Schubert (2006) has also advocated need to understand the optimal strategies for firms to cope with analysis and management of prevailing risks. For achieving this Katsanis

and Pitta (2007) described an innovative practice that has implication for new product developers within and outside the pharmaceutical industry. Stalk (2008) cautioned that there is an urgent need to understand importance of strategic advantage vis-à-vis disposable factories.

Besides, Rao (2008) has stated that the strategic response of pharmaceutical firms in the emerging economies (India and China, for example,) to the new patent regime is to develop multiple competencies and position themselves to simultaneously compete and collaborate globally. Moreover, based on the literature review, Schneider et al., (2010) benchmarked the evolution of reported sustainability activity in the pharmaceutical sector, which has been recognized as a leading sector in industrial sustainability. Wang and Hwang (2011) however, indicated that it is possible, for example, to apply the theoretical framework to case studies in pharmaceutical markets for risk management. Mann and Dutta (2013) utilized the concept of resource based approach to ascertain the resources and the interactions that exist among these resources leading to differential performance in the Indian pharmaceutical industry. The study reveals that it is necessary to understand the people's perception regarding the risk management in different settings.

Since, risk management is an integrated process of describing specific areas of risk, developing a comprehensive plan; integrating the plan and conducting ongoing evaluation are very challenging. It is a process that identifies loss exposures faced by an organization and selects the most appropriate techniques including insurance for treating such exposures. It is evident that many Ayurvedic Pharmaceuticals Manufacturing Companies in India are situated in Vidarbha region, which act as suppliers to large companies. Moreover, in order to have sustainable growth of the industrial sector in general and Ayurvedic Pharmaceuticals sector in particular, the risk management initiatives practiced needs to be evaluated. In the backdrop of above information, it is apparent that more systematic investigations pertaining to risk evaluation as well as management be carried out. Furthermore, since the risk management is a function of risk assessment, the prevailing awareness about the risks prevailing in the ayurvedic products related business.

### *2.1. Scope and Limitations of the Study*

- The study was delimited to Ayurvedic Pharmaceutical Manufacturing Companies of Nagpur Region.
- The study assessed the attitude of ayurvedic pharmaceutical manufacturing companies through its M.D., C.E.O., etc. of Nagpur region towards risk management.
- The views expressed by the respondents will be based on their experience, and exposure to various risk management related aspects. Since these aspects are likely to differ for different respondents, it was a limitation.
- Lack of complete control over the economic and environmental factors was a limitation.

### *2.2. Aims and Objectives of the Study*

- To study the attitude of people working in the ayurvedic pharmaceutical manufacturing companies of Nagpur region towards risk management.
- To suggest measures for minimizing the risk to ayurvedic pharmaceutical manufacturing companies of Nagpur region.

### *2.3. Research Hypothesis*

- The attitude of people working in ayurvedic pharmaceutical manufacturing companies of Nagpur region is favourable towards risk management.
- The initiatives taken by the top management of the ayurvedic pharmaceutical manufacturing companies of Nagpur Region in managing risk are not adequate.

## **3. Methodology**

The design of the study was random group design, where the respondents from ayurvedic pharmaceutical industries were selected randomly. In this study, data was collected from 50 different ayurvedic pharmaceutical industries of Nagpur Region.

### *3.1. Data Collection*

Data collection was done by using survey methodology. The questionnaire was prepared by keeping the objectives of the study in mind and care was taken to cover all the objectives of the study. Reliability of the instrument was assessed using the test-retest method. The validity (content, construct and criterion) of the research instrument was also checked prior to data collection for the main study.

### *3.2. Statistical Procedure Employed*

The data characteristics (descriptive statistics) such as Frequency, Mode, etc. were determined. The data was analyzed using SPSS 18.0 Software.

#### 4. Results and Discussion

##### 4.1. Importance of Risk Management to Achieve Company's Objectives

SN	Response	No. of Respondents	Percent
1	Strongly Disagree	-	-
2	Disagree	-	-
3	Neutral	-	-
4	Agree	35	70.0
5	Strongly Agree	15	30.0
	Total	50	100.0

Table 1: Importance of risk management to achieve Company's objectives

Above Table 1 describes the results obtained from the managers regarding their perception of risk management to achieve Company's objectives. The results indicate that 70.0% respondents indicated simple agreement, while 30.0% indicated their strong agreement to the above mentioned statement that risk management is important to achieve the Company's objectives. Hence, on the basis of the data, it is evident that a significantly (Chi Square = 13.52,  $P < 0.05$ ) high percentage of managers (70 % & 30%) working in the ayurvedic pharmaceutical companies of the study region consider risk management as a very important aspect to achieve Company's objectives. It is also to be noted that response numbering 1 to 3 has not been tick marked by any single respondent.

##### 4.2. Risk Management and Company's Performance

SN	Response	No. of Respondents	Percent
1	Strongly Disagree	-	-
2	Disagree	-	-
3	Neutral	-	-
4	Agree	38	76.0
5	Strongly Agree	12	24.0
	Total	50	100.0

Table 2: Effective risk management can improve Company's performance

Table 2 presents the results obtained from the managers regarding their perception of risk management to achieve Company's objectives. The results indicate that 76.0% respondents agreed that effective risk management is important to improve company performance. However, 24.0% strongly agreed that effective risk management is important to improve company performance. Thus, it is evident from the study result that a significantly ( $P < 0.05$ ) high percentage of managers (76% and 24%) feel that effective risk management is important to improve company performance. Here too no respondents have ticked on response no. 1 to 3.

##### 4.3. Documenting Company's Attitude towards Risk Management

SN	Response	No. of Respondents	Percent
1	Strongly Disagree	-	-
2	Disagree	-	-
3	Neutral	1	2.0
4	Agree	49	98.0
5	Strongly Agree	-	-
	Total	50	100.0

Table 3: Importance of documenting Company's attitude towards risk management for the benefit of staff

Above Table 3 shows the results obtained from the data given by the managers with respect to importance of documenting Companies attitude towards risk management for the benefit of staff. The results indicated that 98.0% managers agreed to the above comment i.e. the management's attitude towards risk management should be documented. However, 2.0% indicated neutrality to the same statement. Hence, it is apparent from the study result that a noticeably ( $P < 0.05$ ) high percentage of managers have a strong view regarding the necessity of documenting Companies attitude towards risk management for the benefit of staff.

#### 4.4. Responsibility of Documentation of Risk Management

SN	Attribute	SD		D		N		A		SA	
		Nos.	Per.	Nos.	Per.	Nos.	Per.	Nos.	Per.	Nos.	Per.
1	Documented and communicated	-	-	-	-	50	100.0	-	-	-	-
2	Understood	-	-	-	-	-	-	32	64.0	18	36.0

Table 4: Importance of the responsibility within the organization of documenting Company's risk management

SA – Strongly Disagree, D - Disagree N - Neutral; A - Agree; SA – Strongly Agree

Above Table 4 shows the results obtained from the data given by the managers with respect to importance of the responsibility within the organization of documenting Company's risk management. 100.0% respondents indicated neutrality i.e. neither agreed nor disagreed with the above comment i.e. the responsibility of documenting and communicating the company's risk management within the organization. However, 36.0% indicated their strong agreement and 64.0% indicated their agreement respectively that the responsibility of company's risk management within the organization is understood. Hence, it is apparent from the study result that a noticeably ( $P < 0.05$ ) high percentage of managers (64% and 36%) have a strong view regarding the responsibility of documenting and communicating the company's risk management within the organization.

#### 4.5. Top Management Facilitative Role

SN		Yes		No		Total
		Nos	Per.	Nos	Per.	
1	Increasing awareness of the benefits of risk management	50	100.0	-	-	50
2	Promoting the acceptance of risk management techniques	50	100.0	-	-	50
3	Developing risk management policies and procedures	50	100.0	-	-	50
4	Providing advice and support	50	100.0	-	-	50
5	Organizing training	14	28.0	36	72.0	50

Table 5: Importance of the facilitative role of the top Management

Above Table 5 shows the results obtained from the data given by the managers with respect to the facilitative role of the top Management vis-à-vis risk management. 100.0% managers agreed that the top management plays a facilitative role in no. 1 increasing the awareness of the benefits of risk management and also promotes the acceptance of risk management techniques and developing policies, procedures along with the providing advice and support. However, only 28.0% respondents indicated that the top management plays a facilitative role in organizing trainings related to risk management. Hence, it is apparent from the study result that a noticeably ( $P < 0.05$ ) high percentage of managers feel that the top management has positive attitude towards risk management within the organization, excepting our findings in SN. 5.

#### 4.6. Degree of Importance Given to Technical and Financial Risk Management

SN		No. of Respondents	Percent
1	Strongly Disagree	-	-
2	Disagree	-	-
3	Neutral	-	-
4	Agree	20	40.0
5	Strongly Agree	30	60.0
	Total	50	100.0

Table 6: Information pertaining to the degree of importance given to Technical and Financial Risk Management

Above Table 6 shows the results obtained from the data given by the managers with respect to the information pertaining to the degree of importance given to Technical and Financial Risk Management. 60.0% managers indicated their agreement that the company provides certain degree of importance to the technical and financial risk management of the company. However, 40.0% strongly agreed that the company provides importance to the technical and financial risk management of the company. Hence, it is apparent from the study result that a noticeably ( $P < 0.05$ ) high percentage of managers (40% and 60%) do have a strong view regarding the degree of importance given to Technical and Financial Risk Management by the company.

#### 4.7. Research Hypothesis Testing

- The attitude of people working in ayurvedic pharmaceutical manufacturing companies of Nagpur region is favourable towards risk management.

- On the basis of the results obtained in this study, the hypothesis, which states that “*The attitude of people working in ayurvedic pharmaceutical manufacturing companies of Nagpur region is favourable towards risk management*” is accepted.

Suggestions for minimizing the risk to Ayurveda pharmaceutical manufacturing companies of Nagpur region.

- Physical Risks: Adequate insurance for fire, earth quake etc. Also, if possible, good fire fighting equipments may be installed.
  - Financial Risks: A good internal control measures with internal audit.
  - Employee Risks: Insurance under Workmen Compensation Act. Also factory environment should have in place all safety measures, to avoid/minimize accidents.
  - Third Party liability risks: Provisions of the “Labeling” rules should be followed. Specially contra indications should be specifically mentioned in the enclosed literature.
  - Quality Control Risks: Highly qualified personnel should be appointed to handle the Quality Control Department. Also godowns for Raw Materials should be adequately ventilated to avoid petrification, insects and fungus etc.
  - Obsolescence Risks: Market Research has to be made at least once a year to find out the extent of success/failure of the prevalent products.
  - Advertisement Risks: care to taken for false, frivolous claims in News Paper and Media. This may give rise to adverse opinion and claims damaging the reputation of the company.
- The initiatives taken by the top management of the ayurvedic pharmaceutical manufacturing companies of Nagpur Region in managing risk are not adequate.
- On the basis of the results obtained in this study, the hypothesis, which states that “*The initiatives taken by the top management of the ayurvedic pharmaceutical manufacturing companies of Nagpur Region in managing risk are not adequate*” is accepted.

## 5. Conclusions

World over risk management is recognized as an essential contributor to business and project success. This is primarily because, it focuses on addressing uncertainties in a proactive manner in order to minimize threats, maximize opportunities, and optimize achievement of objectives. There is wide convergence and consensus on the necessary elements for a risk management process, and this is supported by a growing range of capable tools and techniques, an accepted body of knowledge, an academic and research base, and wide experience of practical implementation across many industries. Regardless of this vision, in practice risk management often fails to meet expectations, as demonstrated by the continued history of business and project failures. However, our study indicates that the ayurvedic pharmaceutical manufacturing companies of study area i.e. Nagpur region have a favourable attitude towards various aspect of risk and risk management. More specifically, it is concluded that majority of ayurvedic pharmaceutical manufacturing companies of study area give importance to risk management to achieve company’s objectives and also company’s performance. However, many companies have unfavourable attitude towards the documentation of procedure that are related to risk management with not many being keen in sharing the responsibility for the same. However, the role of top management appears to be proactive in the technical and financial risk management.

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