

A Study on Doctor's Perception of Malladi Drugs and Pharmaceuticals Ltd –Ranipet

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Abstract: *This study investigates doctors' perceptions of Malladi Drugs and Pharmaceuticals Ltd, a key player in India's pharmaceutical industry, focusing on product quality, efficacy, safety, customer support, and ethical practices. Employing a descriptive research design, data were gathered from 58 doctors using structured questionnaires via convenience sampling. The findings underscore the need for Malladi to enhance transparency, innovation, and communication to bolster trust. Recommendations include strengthening ethical practices, investing in R&D, and optimizing logistics to elevate Malladi's reputation and competitiveness in the Indian pharmaceutical market.*

Keywords: Drug Industry, Para Medical Employee Engagement, Productivity, Leadership, Communication, Skill Development, Motivation

I. INTRODUCTION

The pharmaceutical industry plays a pivotal role in global healthcare, bridging the gap between scientific innovation and patient care. In India, one of the world's largest producers of generic drugs, pharmaceutical companies are critical to ensuring affordable and accessible healthcare solutions. Malladi Drugs and Pharmaceuticals Ltd, a prominent player in this sector, has established itself as a key manufacturer of active pharmaceutical ingredients (APIs) and finished formulations since its inception in 1980. Headquartered in Chennai, India, Malladi has grown to become a trusted name in both domestic and international markets, catering to a wide range of therapeutic categories, including analgesics, antihistamines, and anesthetics. Its commitment to quality, innovation, and regulatory compliance has positioned it as a reliable partner for healthcare providers worldwide.

II. LITERATURE REVIEW

Russell, J., et al. (2015) – Perceptions and Attitudes of Egyptian Health Professionals and Policy- Makers towards Pharmaceutical Sales Representatives and Other Promotional Activities

This study investigates Egyptian doctors' perceptions of pharmaceutical sales representatives (PSRs), finding that 70% view PSRs as key information sources but express concerns over biased promotions. Doctors value product efficacy and safety data but distrust aggressive marketing tactics. The study highlights the influence of gifts and sponsored events on prescribing behavior, with 60% admitting to occasional influence. It suggests that ethical guidelines could improve trust in pharmaceutical interactions. The findings are relevant to Malladi, as Indian doctors may similarly prioritize reliable product information. However, the study's Egyptian focus limits its direct applicability to India's regulatory context. It underscores the need for Malladi to ensure transparent communication to build trust. The reliance on self-reported data may introduce bias.

Tseng, C.W., et al. (2016) – Pharmaceutical Industry-Sponsored Meals and Physician Prescribing Patterns for Medicare Beneficiaries

This US-based study examines how industry-sponsored meals influence physicians' prescribing patterns, finding a significant correlation between free meals and increased prescriptions of promoted drugs. About 65% of doctors receiving meals reported higher brand-name drug prescriptions. The study notes that doctors perceive these interactions as educational but often overlook potential biases. It calls for stricter regulations to mitigate conflicts of interest (COI). For Malladi, this suggests that promotional strategies must be ethical to avoid scepticism among Indian doctors. The



study's focus on the US Medicare system limits its applicability to India's private healthcare model. Self-selection bias in meal attendance may skew results. The findings highlight the importance of Malladi maintaining credible, unbiased engagements."

III. RESEARCH DESIGN

Research Design

This study follows a **descriptive research design** to assess the perceptions and satisfaction levels of healthcare professionals regarding the pharmaceutical products and services of Malladi Drugs and Pharmaceuticals Ltd. Descriptive research is used to collect quantitative data that help analyze the current status, attitudes, and opinions of the respondents.

Sampling Method

A **non-probability purposive sampling** technique has been adopted. Respondents are selected based on their profession in the medical or healthcare field and their direct or indirect interaction with Malladi's pharmaceutical products.

Sample Size

The sample size consists of 58 healthcare professionals, including doctors, pharmacists, and hospital procurement staff, who have experience with Malladi's products.

Data Collection Method

Primary data is collected through a **structured questionnaire** comprising 28 closed-ended questions with multiple-choice and Likert-type scales (5-point and 4-point). The questionnaire is either self-administered or distributed through email/online platforms.

Measurement Scale

Demographic variables are measured using nominal and ordinal scales. Perceptions and satisfaction factors are measured using **5-point Likert scales** ranging from "Strongly Disagree" to "Strongly Agree" or from "Very Poor" to "Excellent".

IV. DATA ANALYSIS TECHNIQUES

Table: Specialty Chemicals Quality

Response	Frequency	Percent
Neutral	16	27.6
Somewhat Satisfied	15	25.9
Very Satisfied	13	22.4
Satisfied	13	22.4
Not at All Satisfied	1	1.7
Total	58	100.0

Interpretations: From the above table, 27.6% of respondents are neutral about the quality and reliability of MDPL's specialty chemicals (e.g., 4-Hydroxycoumarin), while 25.9% are somewhat satisfied, 22.4% are very satisfied, and 22.4% are satisfied. Only 1.7% are not at all satisfied, indicating minimal outright dissatisfaction.



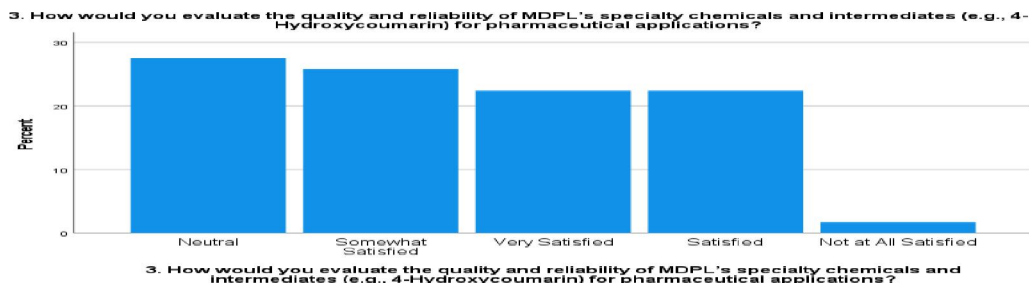


Table: Medication Effectiveness

Response	Frequency	Percent
Agree	18	31.0
Neutral	15	25.9
Strongly Disagree	10	17.2
Disagree	8	13.8
Strongly Agree	7	12.1
Total	58	100.0

Interpretations: From the above table, 31.0% of respondents agree that Malladi's medications are effective, with 12.1% strongly agreeing, reflecting moderate confidence in treatment efficacy. However, 25.9% are neutral, indicating uncertainty, while a combined 31.0% (17.2% strongly disagree and 13.8% disagree) express doubts about effectiveness.

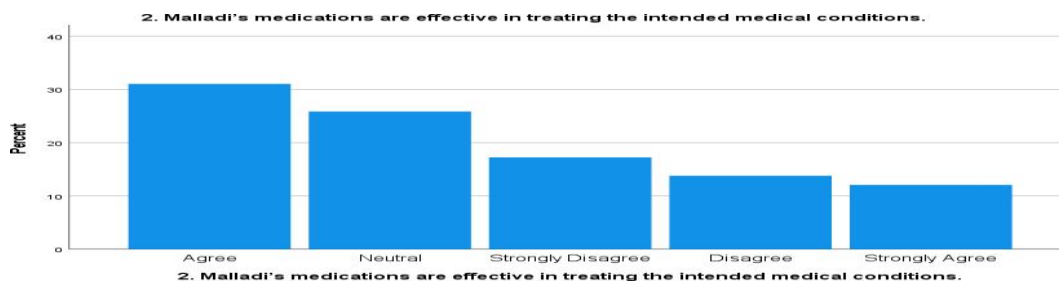


Table 4.24 Correlation between Product Quality and Availability

Correlations		1. The pharmaceutical products from Malladi Drugs and Pharmaceuticals Ltd are of high quality.	4. I am satisfied with the availability of Malladi's products when needed.
1. The pharmaceutical products from Malladi Drugs and Pharmaceuticals Ltd are of high quality.	Pearson Correlation	1	.296*
	Sig. (2-tailed)		.024
	N	58	58
4. I am satisfied with the availability of Malladi's products when needed.	Pearson Correlation	.296*	1
	Sig. (2-tailed)	.024	
	N	58	58

*. Correlation is significant at the 0.05 level (2-tailed).

Table: Correlation between Product Quality and Availability

Interpretations: From the above table, the Pearson correlation coefficient between perceived product quality and satisfaction with product availability is .296, indicating a weak positive relationship. The correlation is statistically significant ($p = .024, < 0.05$), leading to the rejection of the null hypothesis. This suggests that higher perceived product



quality is associated with greater satisfaction with availability, though the relationship is not strong. The sample size ($N = 58$) provides sufficient power for this analysis. Malladi could leverage this connection by ensuring consistent quality and availability to enhance customer satisfaction. However, other factors may also influence availability satisfaction, warranting further investigation.

V. MULTIPLE REGRESSION ANALYSIS HYPOTHESES

Null Hypothesis (H_0): The perceived durability and user-friendliness of Malladi's packaging and adherence to ethical standards in business practices do not significantly predict satisfaction with Malladi's reliability as a pharmaceutical supplier.

Alternative Hypothesis (H_1): The perceived durability and user-friendliness of Malladi's packaging and adherence to ethical standards in business practices significantly predict satisfaction with Malladi's reliability as a pharmaceutical supplier.

Table: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.375	.140	.109	.651

Table: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	3.804	2	1.902	4.487	.016
Residual	23.317	55	.424		
Total	27.121	57			

Table: Coefficients

Predictor	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Std. Error	Beta	
(Constant)	3.166	.308		10.292
Packaging	.252	.085	.410	2.982
EthicalStandards	-.122	.082	-.205	1.494

Chi-Square Test Results

Test	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	20.134	9	.017
Likelihood Ratio	20.621	9	.014
Linear-by-Linear Association	.013	1	.910
N of Valid Cases	58		

Note: 11 cells (68.8%) have expected count less than 5. The minimum expected count is .16.

Interpretations

From the above table, the Pearson Chi-Square test yields a value of 20.134 with a p-value of .017, which is below the 0.05 significance level, leading to the rejection of the null hypothesis. This indicates a statistically significant association between age and satisfaction with Malladi's product availability. The crosstabulation shows that the 45-55 age group has the highest satisfaction (15 very satisfied), while the above 55 group has the most dissatisfaction (4 not at all satisfied). The high percentage of cells with expected counts less than 5 (68.8%) suggests caution in interpretation due to potential test assumption violations. The sample size ($N = 58$) may limit the test's power. Further studies with larger samples are needed to confirm these findings.



VI. SUGGESTIONS & FINDINGS

- 67.2% of respondents are male, indicating a significant male predominance.
- 37.9% of respondents are aged 45–55, the largest age group, followed by 34.5% aged 35–45.
- 34.5% earn between ₹30,001–40,000 monthly, the highest income bracket.
- 46.6% have 11–20 years of experience in practicing medicine, the largest group.
- 31.0% rated API efficacy as neutral and 31.0% as poor, indicating significant concerns.
- 43.1% are very satisfied with product availability, reflecting strong distribution performance.
- 27.6% are neutral about specialty chemicals quality, with 25.9% somewhat satisfied.
- 41.4% agree that Malladi's products are of high quality, indicating a positive perception.

Enhance transparency in business practices to address concerns about ethical standards and rebuild trust among healthcare professionals.

VII. CONCLUSION

This study on doctors' perceptions of Malladi Drugs and Pharmaceuticals Ltd reveals a mixed landscape of strengths and areas for improvement. High satisfaction with product availability (48.3% very satisfied), customer support (48.3% good), and adverse event reporting (53.4% very satisfied) underscores Malladi's operational reliability. However, concerns about ethical practices (46.6% disagree or strongly disagree), product innovation (29.3% disagree), and moderate perceptions of efficacy (31.0% neutral or poor) highlight critical gaps. The weak correlation between product quality and availability ($r = .296$, $p = .024$) and non-significant association between medication efficacy and customer support ($p = .074$) suggest complex perception drivers. Packaging significantly predicts supplier reliability ($\beta = .410$, $p = .004$), but ethical standards do not, indicating trust-building challenges. Malladi must enhance transparency, innovation visibility, and communication to strengthen stakeholder trust. Targeted improvements in ethical practices, R&D investment, and streamlined logistics can boost Malladi's reputation. These efforts will reinforce its competitive edge in the Indian pharmaceutical market. The findings offer actionable insights for Malladi to align with doctors' expectations. Ultimately, addressing these gaps will foster sustainable growth and stakeholder confidence.

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