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EXPLORING THE DRIVERS OF PHYSICIANS' PRESCRIPTIONS: EVIDENCE FROM PHARMACEUTICAL MARKETING AND PROFESSIONAL DETERMINANTS

Sun G.L[1] and Jayasekara B.E.A

Lincoln University College, Malaysia[1]

Dept. of Science for Technology, Faculty of Technology, University of Sri Jayewardenepura, Sri Lanka[2]

ABSTRACT

The pharmaceutical industry plays a critical role in healthcare by providing medicines and other therapeutic products while operating in a highly regulated marketing environment. Although numerous studies have examined pharmaceutical marketing practices, limited empirical evidence exists about the factors influencing physicians' prescribing behavior in Sri Lanka. This study examined the influence of pharmaceutical marketing mix strategies, reputation of the company, knowledge and information from patients, pharmacist-physician collaboration, and peers' opinion on physicians' prescribing behaviour. A quantitative cross-sectional research design was adopted using a structured questionnaire administered to 70 physicians practicing in Sri Lanka. Data were analyzed using IBM SPSS Statistics version 23 through descriptive statistics, Pearson correlation, and multiple linear regression analysis. The regression model was statistically significant ($F = 14.897$, $p < 0.001$) and explained 37.3% of the variance in physicians' prescribing behaviour ($R^2 = 0.373$). Reputation of the company, knowledge and information from patients' and peers' opinions were identified as significant positive predictors of physicians' prescribing behaviour. In contrast, marketing mix strategies and pharmacist-physician collaboration did not demonstrate statistically significant effects. The findings suggest that physicians' prescribing decisions in Sri Lanka are influenced more by organizational credibility, patient engagement and professional interactions than by conventional pharmaceutical promotional activities. These findings contribute to the pharmaceutical marketing literature and provide practical insights for pharmaceutical companies seeking to develop more effective and ethically responsible engagement strategies

KEYWORDS: *Marketing mix strategies; Pharmaceutical Marketing; Physician's prescribing behavior; pharmaceutical industry; Sri Lanka*

Corresponding Author: Gihan Sun, email: gihansun79@gmail.com

https://orcid.org/0009-0002-6556-5101

1. INTRODUCTION

Background

The pharmaceutical industry evolved from traditional druggists who prepared, stored, distributed, and sold plant-based medicines to a modern industry based on chemically developed drugs, progressing from ancient civilizations to the industrial era (Zebroski, 2015; Anderson, 2005). Today, it is a global industry supported by approximately 40 recognized pharmacopoeias that establish standards for medicines (Wiggins & Albanese, 2019). In Sri Lanka, Western medicine was introduced during European invasions and colonial rule to meet the healthcare needs of colonial authorities. Local pharmaceutical manufacturing began in 1959 (Morison, 2024) and became more systematically regulated with the establishment of the State Pharmaceutical Corporation (SPC) in 1971, which strengthened the country's policy of providing free medicines (State Pharmaceutical Corporation, 2021). Sri Lankan pharmaceutical imports were further regularized after the establishment of CDDA (Cosmetic, Drugs and Devises Authority) currently known as NMRA established in 2015 (Atapattu, 1985). There are around 300 registered pharma companies in Sri Lanka with approximate value of LKR 31.5 billion with restricted marketing boundaries that companies are not permitted to advertise in mass media (Syandan, Kodituwakku and Gunaratne, 2008; National Medicine Regulatory Authority, 2019). As per the World Bank statistics 2022 healthcare expenditure is approximately USD 4.03 billion (Sun & Jayasekera, 2024) while pharmaceutical expenditure in total around USD 360 million (Amarasnghe *et al*., 2021).

Research Problem

The pharmaceutical industry has an impact on wellbeing in terms of the quality of life of individuals; the pharmaceutical industry has become a critical and relevant sector of the global economy (Scherer, 2000). The pharmaceutical industry is compelled to be excellent in research and development, keeping physical and mental health with wellbeing of communities globally (VanDyke, 2019). Nevertheless, it has been evident that a company's interest is mainly in business, looking at the statistics on allocations of budgets that are abnormal to usual allocations in common businesses (Woodside *et al*., 2018). Pharmaceutical companies spend approximately 26% of their sales on marketing activities, though they spend only 16% of their sales on research and developments (Murshid *et al*., 2014).

The scenario of pharmaceutical marketing is different from and more complicated than that of other goods and services. The consumer has never been the customer for pharmaceutical products; the prescribing physician. Thus, physicians cannot be categorized as opinion leaders, since they determine the needs of the patients regardless of patients' desire for medicines. Therefore, consumer behavior models were complex most of the time, and that made pharmaceutical companies to work closely with healthcare professionals (Gayaneshwari, 2015).

The marketing mix framework conceptualizes strategy from four core elements that are product, price, place and promotion (Kotler *et al*., 2019; Kotler, Keller and Chernev, 2021). Globally, pharmaceutical marketing mix strategies are shaped by regulatory environments, market maturity and healthcare system structures (Kumar & Agarwal, 2024), and in developing countries, promotional strategies often rely on medical representatives, personal selling and relationship building due to weaker enforcement of promotional codes. The healthcare system is dualistic in Sri Lanka, comprising a tax-funded public sector and a rapidly expanding private sector (Sun & Jaysekera, 2026). Physicians in government hospitals often engage in private practice, creating overlapping exposure to pharmaceutical marketing (Rannan-Eliya *et al*., 2014).

Literature review and Research Gap

Prescribing behavior is a complex outcome influenced by clinical knowledge, patient

characteristics, institutional policies, peer influence, and marketing exposure (Kitsiou *et al*., 2009). The literature distinguishes between rational prescribing based on clinical efficacy, safety, and cost efficiency and influenced prescribing where non-clinical factors play a role (World Health Organization, 2025). In Sri Lanka, studies indicate variability in prescribing patterns between public and private sectors, with private sector prescriptions often involving branded medicines and higher cost (Kumarasinghe & Weerasinghe, 2024). However, empirical evidence remains fragmented and outdated practically regarding how physicians perceive and respond to pharmaceutical marketing activities (Sun & Jayasekera, 2025) where there is a confirmed chronological gap.

Reputation in the pharmaceutical industry primarily reflects perceptions of quality and trust, as physicians are more likely to prescribe medicines manufactured by companies with strong reputations for quality, efficacy, and safety (Dhonden et al., 2020; Gayaneshwari, 2015). Global and regional literature confirmed that reputation plays a foremost role in prescribing behavior, and physicians are more concerned with clinical outcome and safety than the cost of the therapy (Gayaneshwari, 2015; Hailu, Workneh and Kahissay, 2021; Biswas & Ferdousy, 2016). There is a prominent gap of knowledge in the Sri Lankan context where there is an absence of research in this academic discipline.

Pharmacist attributes play a vital role in the pharmaceutical delivery system where inter-professional collaboration may strengthen the prescribing behavior of physicians (Ahmed *et al*., 2020; Lagisetty *et al*., 2020). Though global evidence confirms its vitality, the pharmacists' role in Sri Lanka is more towards dispensing, issuing drugs, and stock management, thus not actively engaged in treatments or clinical decision-making (Sun & Jayasekera, 2024). Therefore, this factor warrants further investigation due to the practical disparities and contextual gaps identified in the existing literature, indicating that this area of study has received insufficient attention. Knowledge of the patient is critical in diagnosis and self-administration of oral or certain parental products, and it influences prescribing behavior by 60% to 70% globally (Santra *et al*., 2022; Al Shamsi *et al*., 2019) though there are contextual and knowledge gaps in Sri Lankan and regional context due to lack of research in the subject area and considering different geo literacy aspects (Sun & Jayasekera, 2024).

Peers' opinions represent another important global factor influencing physicians' choices of drugs and therapies, particularly through the influence of opinion leaders and professional colleagues (Wang et al., 2023; Moretti et al., 2025; Carlsson et al., 2024). However, a knowledge gap exists in the Sri Lankan context due to the lack of research on this subject. Given the unique duality of healthcare practices among physicians in Sri Lanka, this area warrants critical investigation (Sun & Jayasekara, 2026).

Based on identified contextual, empirical and knowledge gaps, this study investigates the factors that influence physicians' prescribing behaviors in Sri Lanka. The proposed conceptual framework integrates marketing mix strategies, company reputation, knowledge of and information from patients, pharmacist-physician collaborations and peers' opinions to provide a comprehensive understanding of prescribing behavior within Sri Lankan healthcare context.

Research Objectives

1. To examine the influence of pharmaceutical marketing mix strategies on physicians' prescribing behavior in Sri Lanka.
2. To determine the influence of the reputation of pharmaceutical companies on physicians' prescribing behavior.
3. To assess the influence of knowledge and information from patients on physicians' prescribing behavior.
4. To examine the influence of pharmacist–physician collaboration on physicians' prescribing behavior.
5. To evaluate the influence of peers' opinion on physicians' prescribing behavior.

Significance of the study

The study contributes both academic and pharmaceutical management knowledge, providing empirical evidence on physicians' prescribing behavior in Sri Lanka, while previous studies mostly focus on prescribing patterns, antimicrobial stewardship, or polypharmacy, with limited studies that focus on pharmaceutical marketing. Therefore, the study addresses important contextual and knowledge gaps utilizing five independent variables within a single conceptual framework.

Findings provide factors that mostly influence on most influential factors that affect physicians' prescribing behavior, which pharmaceutical companies could focus on to identify areas to invest profitably. Policymakers and professional bodies may utilize these findings to strengthen their policies on rational use of medicines and professional collaborations. The study also provides a foundation for future researchers interested in prescribing behaviors of physicians and pharmaceutical marketing in Sri Lanka.

Theoretical Framework

Table I: S-O-R Model and Variables

S-O-R Component	Variable
Stimulus (S)	Marketing mix strategies, Company reputation, Knowledge and information from patient, Pharmacist-physician collaboration, Peer's Opinion
Organism (O)	Physician's cognitive evaluation and decision-making process
Response (R)	Physician's prescribing behavior

S-O-R (Stimulus Organism Response) model by Robert Woodworth (Chudhery *et al*., 2023) has been justified as the most appropriate and Practical model to be considered, and it has been confirmed in a conceptual paper involving 286 healthcare specialists, which targets understanding physicians' prescribing behavior (Alovi and Kani, 2019), despite the availability of the Theory of Planned Behavior, Diffusion of innovation theory, Social learning theory and social network theory (Fattore *et al*., 2009; Makowsky *et al*., 2013; Liu *et al*., 2019; Saha & Fugh-Berman, 2021).

Conceptual Framework

Based on the reviewed literature and the S-O-R theoretical framework, five hypotheses were developed to examine the relationships between the independent variables and physicians' prescribing behavior

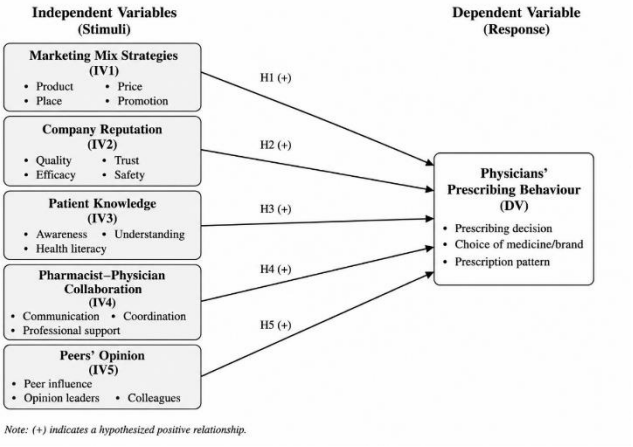

Figure 1: Conceptual Framework

Research Hypotheses

1. To determine the pharmaceutical marketing mix strategies used by pharmaceutical companies in Sri Lanka
2. To determine the prescribing behaviors of physicians in Sri Lanka
3. To identify the relationship between pharmaceutical marketing mix strategies, other determinants, and prescribing behaviors of physicians in the government and private sector.
4. To identify the impact of pharmaceutical marketing mix strategies and other determinants on prescribing behaviors of physicians in Sri Lanka.

2. METHODOLOGY

Research Design

This study adopted a quantitative, cross-sectional design examining the influence of pharmaceutical marketing on physicians' prescribing behavior in Sri Lanka. A deductive approach was employed whereby hypotheses were formulated from existing literature. The research was undertaken to evaluate the applicability of the conceptual framework, to assess the reliability of research instrument, and to examine the feasibility of the proposed methodology before conducting a large-scale investigation. The study focuses on identifying the relationships between variables.

Population and Sampling

Table 2: Operational Definition of Variables

Variable	Operational Definition	Source	No. of Items
Marketing Mix Strategies (Independent Variable)	The extent to which physicians perceive that pharmaceutical companies' product, price, and place and promotional activities influence their prescribing decisions.	(Kotler *et al.*, 2019; Kotler, Keller & Chernev, 2021; Kumar & Agarwal, 2024	3
Reputation of the Company (Independent Variable)	Physicians' perception of the pharmaceutical companies' credibility, product quality, safety, efficacy and overall corporate reputation.	Gayaneshwari, 2015; Dhonden *et al.*, 2020; Hailu, Workneh and Kahissay, 2021	3
Knowledge and Information from Patients (Independent Variable)	The extent to which patients' knowledge, awareness and information influence physicians' prescribing behavior during clinical consultations.	Al Shamsi *et al.*, 2019; Santra et al., 2022; Gebresillassie *et al.*, 2018; Horwood *et al.*, 2016	4
Pharmacist–Physician Collaboration (Independent Variable)	The degree of professional collaboration and communication between pharmacists and physicians in supporting prescribing decisions.	Ahmed *et al.*, 2020; Lagisetty *et al.*, 2020; Abrogoua, Konan and Doffou, 2016	4
Peers' Opinion (Independent Variable)	The influence of colleagues, opinion leaders and other physicians on prescribing decisions.	Wang *et al.*, 2023; Carlsson *et al.*, 2024; Moretti *et al.*,2025	4
Physicians' Prescribing Behavior (Dependent Variable)	Physicians' prescribing decisions and behaviors relating to medicine selection, prescribing patterns and therapeutic choices.	Blaise Savadogo *et al.* 2014; World Health Organization 2025; Hailu, Workneh and Kahissay, 2021	8

Population and Sampling

The targeted population comprised registered physicians practicing in Sri Lanka. A simple random sampling technique was adopted, minimizing selection bias and providing each eligible physician with an equal opportunity. A total of 70 self-administered questionnaires were distributed to physicians across different specialties and professional levels, in accessible geographic areas in Sri Lanka. Since the investigation was designed as a preliminary study, the sample size was considered appropriate for evaluating the reliability of the research instrument and for primary statistical analysis.

Research Instrument

Data were collected using a questionnaire with a five-point Likert scale ranging from 1= Strongly Disagree to 5= Strongly Agree. The questionnaire was developed based on validated measures reported in previous studies and adapted to suit the Sri Lankan pharmaceutical context.

Data analysis

Data were analysed using IBM SPSS Statistics Version 23. Descriptive statistical techniques including frequencies, percentages, means and standard deviations were employed to summarize respondents' characteristics and examine the study variables. Inferential statistical techniques comprising independent sample t-test, Pearson correlation, multiple regression analysis, reliability analysis (Cronbach's alpha), KMO and Bartlett's test, and normality assessment were performed to evaluate the measurement properties of the instrument and test the proposed.

3. RESULTS

Demographics

The study consists of physicians with different geographies and specialties. Most of the respondents were 51 years and above. While male physicians accounted for 57% of the sample, the participants were mainly from western and central provinces, and medical offices and senior house offices represented the largest professional group.

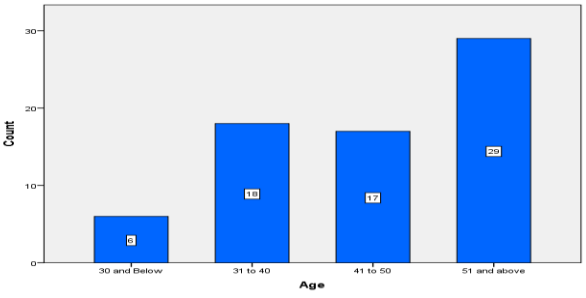

Chart I: Age Distribution

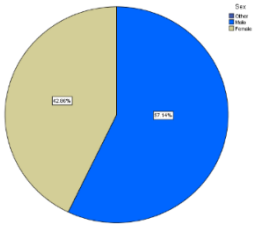

Chart II: Gender Distribution

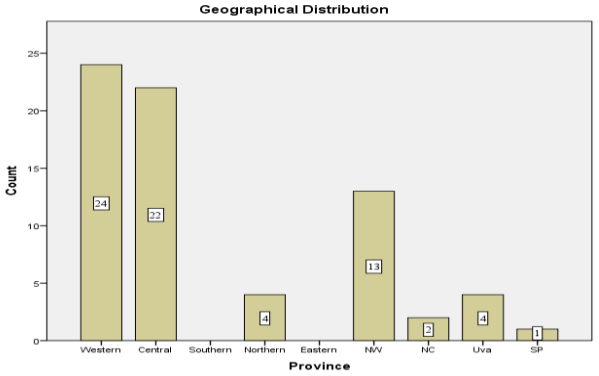

Chart III: Geographic Distribution

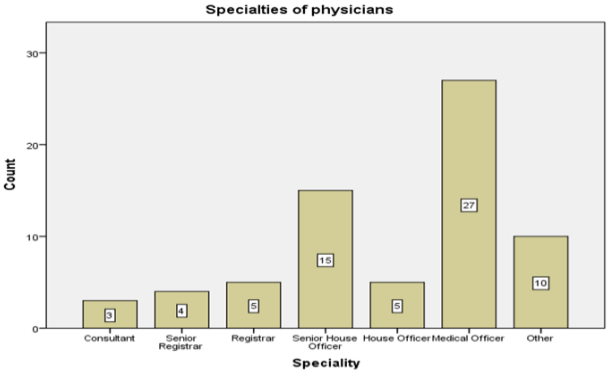

Chart IV: Specialty Distribution

Assumption Testing

Missing values were minimal, and they were replaced with the mean while outliers were treated by Winsorization (Abuzaid & Alkrunz, 2024).

Table 3: Normality

Variable	Skewness	Std. Error	N_SK	Kurtosis	Std. Error	N_Ku
Physician's prescription Behavior	0.464	0.287	**1.617**	-.555	0.566	**-0.981**
Marketing Mix Strategies	.165	0.287	**0.574**	-.657	0.566	**-1.160**
Reputation of the Company	-.186	0.287	**-0.649**	-.588	0.566	**-1.039**
Knowledge and Information from patient	-.164	0.287	**-0.573**	-.601	0.566	**-1.062**
Pharmacist-Physician Collaboration	-.614	0.287	**-2.139**	-.170	0.566	**-0.300**
Peer's Opinion	.194	0.287	**0.678**	-.672	0.566	**-1.187**

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The dispersion indicates a similar mid-range spared that interquartile range continuously between 0.51 and 0.75. therefore. all other variables are precise, other than Peer's Opinion (Weir & Vincent, 2021). The distribution is flatter with negative kurtosis, and all variables have slight skewness in both negative and positive directions, but all the variables are in the range of -1 to +1. Z- Scores of skewness and kurtosis indicate normal distribution except Pharmacist-Physician Collaboration, which is not in the reference range of +1.96 to -1.96, while Q-Q plots visualized normal distribution of all residuals (Kim, 2013).

Table 4: Sampling Adequacy

Variable	KMO Measure of Sampling Adequacy	Bartlett's Test of Sphericity			Analysis	Acceptability
		Approx. Chi-Square	df	Sig.		
Physician's prescription Behavior	0.691	107.323	28	0.000	Mediocre to Avg.	Yes
Marketing Mix Strategies	0.675	40.704	3	0.000	Mediocre	Yes
Reputation of the Company	0.648	26.274	3	0.000	Mediocre	Yes
Knowledge and Information from patient	0.699	50.362	6	0.000	Mediocre to Avg.	Yes
Pharmacist-Physician Collaboration	0.352	23.098	6	0.001	Low	Yes
Peer's Opinion	0.748	86.911	6	0.000	Avg.	Yes

KMO and Bartlett's test for sample adequacy results were acceptable, other than Pharmacists – physician collaboration (Hair, 2018).

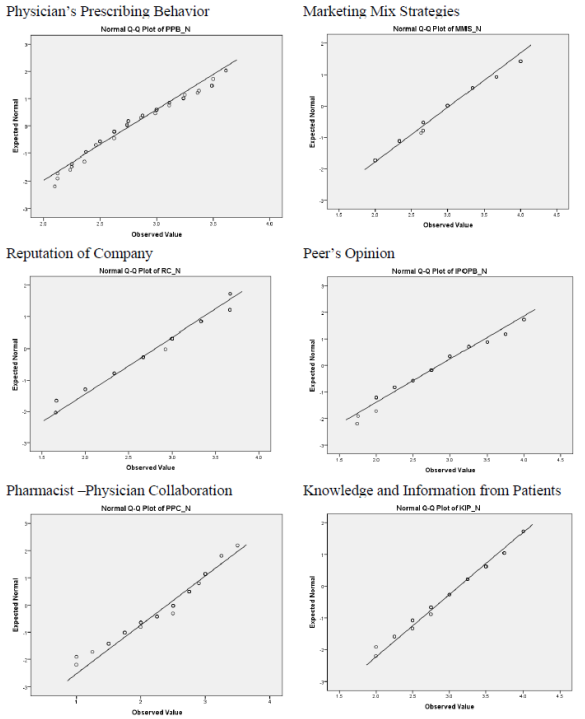

Figure 2: Q-Q Plots

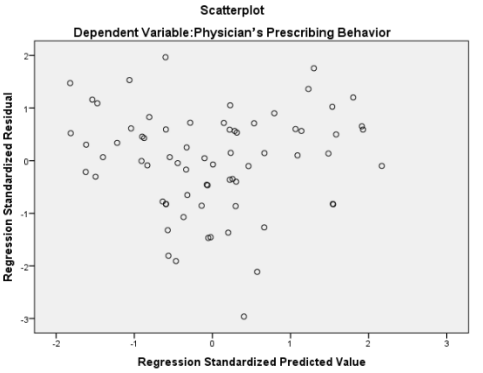

Figure 3: P-P Plots

P-P plots appeared to be homoscedastic, and the coefficients table.

Table 5: Reliability

Variable	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Physician's prescription Behavior	.629	.675	8
Marketing Mix Strategies	.707	.723	3
Reputation of the Company	.641	.645	3
Knowledge and Information from patient	.695	.707	4
Pharmacist-Physician Collaboration	.498	.489	4
Peer's Opinion	.779	.790	4

Cronbach alpha levels demonstrate well in Marketing Mix Strategies, knowledge and information from Patients' and Peers' Opinion while Physicians' Prescribing Behavior and Reputation of Companyare acceptable, but Pharmacist- Physician Collaboration appeared to be challenging and marginally not in the acceptable range (Hair, 2018).

Descriptive Statistics

Knowledge and information from patients recorded the highest mean score (M=3.14. SD= 0.51). Prescribing Behavior and Reputation of Companyare acceptable but Pharmacist- Physician Collaboration appeared to be challenging and marginally not in indicating that it is the most influential factor among physicians' prescribing behavior while pharmacist-physician collaboration indicated the lowest mean (M=2.41, SD= 0.56) and the remaining constructs were moderate.

Table 6 descriptive

Variable	Mean	SD	Skewness	Kurtosis
Physicians' Prescribing Behavior	2.77	0.39	0.464	-0.555
Marketing Mix Strategies	3.02	0.58	0.165	-0.657
Reputation of the Company	2.80	0.56	-0.186	-0.588
Knowledge and Information from Patients	**3.14**	0.51	-0.164	-0.601
Pharmacist–Physician Collaboration	**2.41**	0.56	-0.614	-0.170
Peers' Opinion	2.85	0.61	0.194	-0.672

Correlations Analysis

Most of the variables were in moderate levels of correlation in Pearson's correlations, however Marketing Mix Strategies and Pharmacist – Physician Collaboration demonstrates a weaker correlation. Cronbach alpha levels (>0.7) demonstrate week Physicians' Prescribing Behavior and Reputation of Company, but Pharmacist – Physician Collaboration was not acceptable. All variables are significant and linear in regression analysis (Murshid et al., 2014).

Table 7 Correlations

Correlations							
		Physician's prescription Behavior	Marketing Mix Strategies	Reputation of the Company	Knowledge and Information from patient	Pharmacist-physician Collaboration	Peer's Opinion
Physician's prescription Behavior	Pearson Correlation	1	.392**	.591**	.589**	.355**	.575**
	Sig. (2-tailed)		.001	.000	.000	.003	.000
	N	70	70	70	70	70	70
Marketing Mix Strategies	Pearson Correlation	.392**	1	.503**	.383**	.116	.508**
	Sig. (2-tailed)	.001		.000	.001	.338	.000
	N	70	70	70	70	70	70
Reputation of the Company	Pearson Correlation	.591**	.503**	1	.319**	.238*	.451**
	Sig. (2-tailed)	.000	.000		.007	.047	.000
	N	70	70	70	70	70	70
Knowledge and Information from patient	Pearson Correlation	.589**	.383**	.319**	1	.344**	.512**
	Sig. (2-tailed)	.000	.001	.007		.004	.000
	N	70	70	70	70	70	70
Pharmacist-Physician Collaboration	Pearson Correlation	.355**	.116	.238*	.344**	1	.348**
	Sig. (2-tailed)	.003	.338	.047	.004		.003
	N	70	70	70	70	70	70
Peer's Opinion	Pearson Correlation	.575**	.508**	.451**	.512**	.348**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.003	
	N	70	70	70	70	70	70
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							

Multiple Regression Analysis

Table 8: Coefficients

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	Collinearity Statistics VIF
1	(Constant)	.774	.241		3.204	.002		
	Marketing Mix Strategies	-.042	.070	-.063	-.603	.549	.622	1.60
	Reputation of Company	.273	.069	.393	3.951	.000	.682	1.46
	Pharmacist- physician Collaboration	.049	.063	.070	.774	.442	.818	1.22
	Knowledge and Information from patient	.263	.076	.347	3.481	.001	.681	1.46
	Peer's Opinion	.144	.069	.228	2.090	.041	.568	1.76

a. Dependent Variable: Physician's Prescribing Behavior

Multiple regression analysis results revealed that the overall regression model satisfied the assumptions of linearity, normality, and homoscedasticity, as confirmed by Q–Q and P–P plots as well as variance inflation factor (VIF) values; all factors were below 2, indicating no multicollinearity issues (O'Brien, 2007).

Among the predictors, three variables were found to be statistically significant: reputation of the company ($\beta = 0.393$, $p < 0.001$), knowledge and information from patients ($\beta = 0.347$, $p = 0.001$), and peer opinion ($\beta = 0.228$, $p = 0.041$). In contrast, marketing mix strategies ($p = 0.549$) and pharmacist–physician collaboration ($p = 0.442$) were not statistically significant (Hair, 2018). These findings indicate that while the regression model is valid and the linearity assumption holds, only reputation, collaboration of patients' knowledge and information and peer opinion have a meaningful impact on physicians' prescribing behavior, whereas marketing mix strategies and patient-provided information do not exert a significant influence.

Table 9: Multiple Linear Regression

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	243.503	5	48.701	14.897	.000[b]
	Residual	209.230	64	3.269		
	Total	452.733	69			

a. Dependent Variable: PPB

b. Predictors: (Constant), IPOPB, PPC, MMS, KIP, RC

Multiple linear regression analysis was conducted to examine influences on physicians' prescribing behavior, and the overall regression model was statistically significant ($F=14.897$, $P<0.001$), indicating the independent variables jointly explained a significant portion of the variation of physicians' prescribing behavior.

Table X: Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.611[a]	.373	.334	1.21433

a. Predictors: (Constant), MMS, PPC, KIP, IPOPB

Model summary explains 37.3% of variance in physicians' prescribing behavior ($R2= 0.373$) with an adjusted R2 of 0.334, demonstrating moderate explanatory power (Field, 2018; Hair *et al.*, 2021).

4. DISCUSSION

Marketing Mix Strategies

Finding; Not significant ($\beta= -0.063$, $p= 0.549$)

Conflicting to the proposed hypothesis, marketing mix strategies did not demonstrate a statistically significant influence on physicians' prescribing behavior, though it differs from several international studies (Kumar and Agarwal, 2024; Hailu, Workneh and Kahissay, 2021). Possible explanations may include the evolving pharmaceutical environment in Sri Lanka, physicians' increasing emphasis on scientific evidence, professional credibility, and ethical considerations. Additionally, physicians may perceive certain ethical promotional practices as contributing to enhanced corporate reputation.

Reputation of the company

Finding; Significant ($\beta= 0.393$, $p< 0.001$)
Reputation emerged as the strongest predictor, and it is consistent with previous studies reporting that physicians prefer medicines from more trustworthy, ethical, and scientifically credible companies (Dhonden *et al.*, 2020; Gayaneshwari, 2015; Hailu, Workneh and Kahissay, 2021). In the Sri Lankan context, physicians interact with multiple

pharmaceutical companies, and therefore, corporate reputation appears to play an important role in reducing risk and increasing confidence in prescribing behavior. Findings suggest that sustained investments in corporate credibility and ethical business practices may have a greater influence on prescribing behavior than conventional promotional activities.

Knowledge and Information from Patient

Finding; Significant (β= 0.347, p= 0.001)
Patient factor significantly influenced physicians' prescribing behavior, supporting the corresponding hypothesis. The finding agrees with previous research emphasizing the role of informed patients in clinical decision-making (Al Shamsi *et al*., 2019; Santra *et al*., 2022). Increasing access to health information and digital resources may encourage more collaborative consultations, requiring physicians to consider patients' expectations during prescribing. These findings highlight the importance of improving health literacy and patient education within the health system.

Pharmacist-Physician Collaboration

Finding; Not significant (β= 0.070, p= 0.442)
Inter-professional collaboration did not demonstrate a statistically significant influence, though previous international literature has reported its positive impact on prescribing quality (Ahmed *et al*., 2020; Lagisetty *et al*., 2020). Findings may reflect healthcare structure in Sri Lanka where pharmacists are primarily involved in dispensing and inventory management rather than participating directly in therapeutic decision-making. Relatively low internal consistency for the construct suggests further refinements of the measurement instrument in future studies.

Peers's Opinion

Finding; Significant (β= 0.228, p= 0.041)
Peers' opinions were found to have a significant influence on prescribing behavior, supporting the proposed hypothesis, which is consistent with studies on professional interactions, clinical discussions, and opinion leaders (Carlsson *et al*., 2024; Wang, Larrain and Groene, 2023; Moretti *et al*., 2025). According to the duality of practice in Sri Lanka, professional networking strengthens clinical decision-making. This finding highlights the importance of professional collaboration and CME (Continuous Medical Education) in shaping prescribing behavior.

Overall Discussion

Physicians' prescribing behavior in Sri Lanka is influenced more strongly by trust, professional interactions, and patient-related information than by traditional pharmaceutical marketing activities. Conventional marketing strategies may remain important to create awareness, and they appeared to exert less influence on prescribing decisions than organizational reputation and interpersonal factors. These findings contribute to existing literature by providing empirical evidence from the Sri Lankan healthcare context and emphasize the need for pharmaceutical companies to adopt more ethical, evidence-based, and relationship-oriented engagement strategies.

5. CONCLUSION

The findings demonstrate that reputation, patient factors and peers' opinions were significant positive predictors of physicians' prescribing behavior. In contrast, marketing mix strategies and pharmacist-physician collaboration did not demonstrate a statistically significant impact, and the regression model explains 37.3% of variation in prescribing behavior, indicating a moderate level of explanatory power. Overall, the findings suggest that physicians' prescribing decisions in Sri Lanka are influenced more by organizational credibility, patient engagement and professional interaction than by conventional pharmaceutical promotion effects.

Practical Implications

The findings have important implications for pharmaceutical companies, healthcare organizations

and policymakers. Pharmaceutical companies should focus on strengthening corporate reputation through ethical practices, product quality, scientific credibility, and transparent communication rather than preliminary conventional promotions. Investing in CME, evidence-based communication, and long-term professional engagement may be more effective. Significant influence on patient knowledge highlights the importance of public health literacy through patient education and accessible medical information in local languages. Influence of peers' opinions suggests that professional forums, medical associations and scientific conferences remain important platforms for disseminating evidence-based prescribing practices.

Limitation and Future Research

The study consists of several limitations that should be considered when interpreting findings. The study was done using limited samples (70 physicians), which may limit the generalizability of the findings to the broader physician population in Sri Lanka. The pharmacist-physician collaboration construct demonstrated relatively low internal consistency, where refinements of measurement items may improve reliability in future studies. Although selected variables explained a meaningful proportion of physicians' prescribing behavior other organizational, regulatory and behavioral factors may also influence prescribing decisions. Future studies should employ larger and more geo-representative samples, refined measurement instruments, and investigate additional determinants such as digital pharmaceutical marketing, organizational culture, regulatory policies and physicians' clinical experience to further strengthen the understanding of prescribing behavior within the Sri Lankan healthcare context.

6. REFERENCES

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