

DOI: <https://dx.doi.org/10.18203/2319-2003.ijbcp20261958>

Original Research Article

Impact of patient's socioeconomic status on drug prescribing decisions among physicians: a qualitative analysis

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Received: 23 April 2026

Revised: 21 May 2026

Accepted: 25 May 2026

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ABSTRACT

Background: A qualitative descriptive study was conducted among 50 physicians from public and private healthcare sectors using purposive sampling. Data was collected through semi-structured, open-ended interviews to explore physician's views on how patient socioeconomic status (SES) influences prescribing patterns. Responses were analyzed thematically to identify key determinants and strategies used by physician's to address socioeconomic disparities.

Methods: A qualitative descriptive study was conducted among 50 physicians from public and private healthcare sectors using purposive sampling. Data was collected through semi-structured, open-ended interviews to explore physician's views on how patient SES influences prescribing patterns. Responses were analyzed thematically to identify key determinants and strategies used by physician's to address socioeconomic disparities.

Results: Physicians widely acknowledged SES as a major determinant of prescribing decisions with affordability influencing drug selection, dosage and treatment duration especially in chronic and elective care. Common adaptive strategies included prescribing cost-effective regimens, providing free samples, and referring patients to government schemes such as Jan Aushadhi and NPCBVI. While most physicians recognized the affordability benefits of generic drugs, scepticism regarding their bioavailability and clinical efficacy persisted. Ethical and emotional strain was evident, particularly when physicians had to balance optimal therapy with patients' financial constraints. Emergency and critical care prescribing remained largely SES neutral.

Conclusions: Patient's SES significantly shapes prescribing decisions in non-emergency contexts. Enhancing access to affordable medicines, strengthening trust in generics through regulatory oversight, and integrating pharmaco-economic and socioeconomic sensitivity training into medical education are essential to promote equitable, patient-centered prescribing practices.

Keywords: Socioeconomic status, Prescribing practices, Generic drugs, Healthcare accessibility, Pharmaco-economics

INTRODUCTION

According to the World Health Organisation rational prescribing has been defined by as "when patients receive the appropriate medicines, in doses that meet their own individual requirements, for an adequate period of time, and at the lowest cost both to them and the community".¹ Prescription decisions in clinical practice are frequently influenced by a variety of non-clinical factors, among

which the patient's SES plays an important role.² SES, which is primarily measured by income, occupation, and education, strongly influences access to healthcare services, medication adherence, and overall treatment outcomes.³ According to the World Health Organization, medication adherence is affected by patient, health system, therapy, medical condition, and the socioeconomic variables.⁴

In developing nations like India, where a major section of the population lacks full health insurance coverage, cost constraints might prohibit patients from accessing required medications.⁵ Physicians frequently encounter ethical and professional challenges while selecting whether to prescribe the most effective treatments and ensure affordability for patients from low-income backgrounds.⁶ This dynamic can lead to prescription changes, use of cheaper or fewer medications, or substitution with generic drugs.⁷ Although generic drugs are intended to improve accessibility, clinical use remains limited due to still open questions about their bioavailability and therapeutic equivalency.⁸

However, studies have revealed that more than 50% of all drugs are prescribed, dispensed, or sold incorrectly, which impacts medication adherence by patients.⁹ Patients with low SES are more likely to delay care, rely on emergency services, and discontinue medicine prematurely which affects disease management. Addressing these inequities involves not just health policy actions but also training activities that educate medical practitioners to socioeconomic determinants of health.¹⁰

Hence a study was conducted to understand the level of impact of patients SES on prescribing practice of physician.

METHODS

A qualitative descriptive study was conducted in the Tumkur district, Karnataka, to explore physician's perceptions of how patient's SES influences drug prescription practices. The study was carried out over a period of six months, from March 2024 to August 2024, after obtaining approval from the institutional ethics committee. The study was conducted at Sri Siddhartha Medical College and Hospital, Tumkur, a tertiary care teaching institution, and was extended to include private secondary and tertiary healthcare centres within the same district. This provided a diverse range of participants representing both public and private healthcare sectors. A

total of 50 physicians participated in the study, selected using a purposive sampling technique to ensure adequate representation across various specialties. Physicians with a minimum of five years of clinical experience in their respective specialties were included in the study. Data was collected using a self-developed, pre-validated semi-structured questionnaire consisting of six open-ended questions designed to explore physician's opinions. The questionnaires were administered through a one-on-one interview, allowing for open discussion and detailed qualitative insights. The study consisted of 50 participants those who having more than 5 years of experience in their respective departments were involved in the study through purposive sampling. Prior to participation a written informed consent was obtained from all respondents. Data obtained from the semi-structured interviews were transcribed and analysed using a qualitative descriptive approach. Responses to the open-ended questions were reviewed in detail and subjected to thematic analysis. Initially, transcripts were read repeatedly to achieve data familiarisation. Meaningful units were then coded manually, and similar codes were grouped to form categories and themes reflecting physicians' perceptions of the influence of patients' SES on prescribing practices. Descriptive statistics were used to summarise participant characteristics. The analysis was conducted systematically to ensure credibility and consistency of the findings.

RESULTS

A total of 50 physicians from different clinical specialties across Tumkur district participated in the study. Among them, 33 (66%) were male and 17 (34%) were female. Most participants belonged to the 40-50 years age group (46%), followed by 30-40 years (30%), 50-60 years (22%), and 60-70 years (2%).

Clinical experience ranged from 5 to 30 years. Participants included physicians from surgical, non-surgical, super-specialty, and private clinical practice settings. The demographic and professional characteristics of the participants are summarized in Table 1.

Table 1: Demographic and professional characteristics of participating physicians, (n=50).

Characteristics	Category	N	Percentage (%)
Gender	Male	33	66
	Female	17	34
Age group (in years)	30-40	15	30
	40-50	23	46
	50-60	11	22
	60-70	01	02
Clinical experience (in years)	5-10	14	28
	10-20	23	46
	20-30	13	26
Department type	Surgical	18	36
	Non-surgical	16	32
	Super-specialty	09	18
	Private clinic	07	14

Strategies to support patients from low socioeconomic backgrounds

Physicians described several approaches adopted to improve treatment accessibility for patients from lower socioeconomic backgrounds. These included prescribing affordable medications, reducing the number of drugs where possible, providing free drug samples, reducing consultation or hospital charges and referring patients to government supported schemes such as Jan Aushadhi and NPCBVI (National Programme for Control of Blindness and Visual Impairment). Some physicians also reported collaborating with NGOs (Non-Governmental Organizations) or personally assisting patients who could not afford prolonged treatment.

Perceptions toward generic drugs

Perceptions regarding generic medicines varied among participants. Many physicians believed that generic drugs helped reduce treatment costs and improve accessibility for economically disadvantaged patients. However, some participants expressed concerns regarding the quality, bioavailability and clinical effectiveness of generic

medications. Several physicians emphasized the need for stricter quality control measures, stronger regulatory oversight and better evidence-based training to improve confidence in generic prescribing.

Ethical and emotional dimensions of prescribing

Many physicians reported experiencing ethical and emotional challenges while treating patients from low socioeconomic backgrounds. Participants described difficulty balancing standard treatment recommendations with patient's financial limitations, particularly in specialties such as oncology, orthopedics and critical care, where treatment costs are often high. Despite these challenges, physicians across all specialties expressed a strong commitment toward providing equitable patient care.

Department wise variations in the influence of SES on prescribing practices are summarized in Table 2. Overall, physicians agreed that SES had a greater impact on prescribing decisions in chronic and elective care settings, while its influence was minimal during emergency and life-saving situations (Figure 1).

Table 2: Department-wise influence of SES on prescribing decisions.

Department category	Influence of SES on prescribing	Common adaptive strategies
Surgical specialties	Moderate	Cost-based implant selection, referrals
Non-surgical specialties	High	Generic prescribing, NGO collaboration
Super-specialty departments	Moderate to high	Government scheme utilization
Critical care/Emergency	Minimal	Immediate life-saving care prioritized
Private practice	Moderate to high	Fee reduction, Jan Aushadhi referral

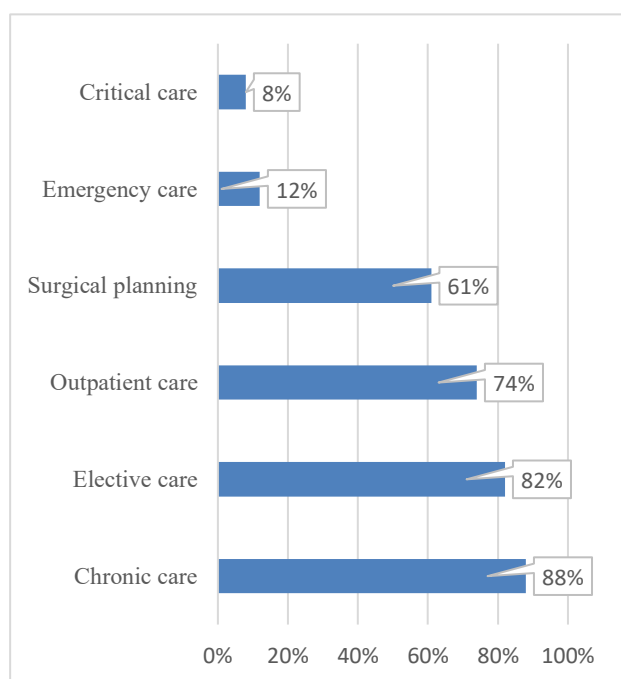


Figure 1: Influence of SES on prescribing decisions across clinical settings.

DISCUSSION

This qualitative study explored physician's perceptions of how patients' SES influences prescribing decisions across multiple specialties in Tumkur district, Karnataka. The findings reveal that SES substantially shapes prescribing behaviour, treatment planning and patient adherence, aligning with recent literature highlighting social determinants as major influences on rational drug use and health outcomes.^{11,12}

Physicians in this study widely acknowledged that affordability often determines drug choice, especially for chronic diseases requiring long-term therapy. This observation parallels findings from India and African, where economic barriers force prescribers to modify ideal therapeutic regimens.^{13,14} In developing nations with high out-of-pocket expenditures, SES continues to be a primary determinant of access to medicines.¹⁵

Consequently, physicians face ethical tension between adhering to evidence-based protocols and ensuring patient affordability, a dilemma echoed in other qualitative analyses of prescriber decision-making.¹⁶

Adaptive strategies reported by participants such as prescribing fewer but more potent medications, providing free samples, and referring patients to government schemes reflect pragmatic approaches to equity-oriented care. These findings are consistent with evidence showing that physicians often follow “prescriptive empathy” by tailoring therapy to patient’s financial realities. Government initiatives like Jan Aushadhi and NPCBVI were recognized as valuable, though their reach and drug availability remain limited.^{17,18}

A recurring theme was the perception of generic drugs. Although most participants acknowledged that generics improve affordability, scepticism persisted about their bioavailability and clinical equivalence especially among specialists managing critical conditions. This hesitation mirrors evidence from a multinational survey showing persistent doubts about generic efficacy and manufacturer reliability among clinicians.¹⁹ Strengthening regulatory oversight and enhancing quality assurance systems are essential for improving trust and increasing generic uptake.²⁰ Moreover, integrating Pharmacoeconomics and evidence-based prescribing into medical education could empower future physicians to make cost-sensitive yet clinically sound decisions.²¹

Ethical and emotional strain was also evident, particularly among physicians treating low-SES patients in oncology, orthopaedics, and emergency care. Similar studies highlight “moral distress” when clinicians must compromise optimal therapy due to cost constraints.²² Despite these challenges, most participants maintained a strong commitment to equitable care consistent with findings that intrinsic moral duty often drives physicians to minimize financial burdens on patients.²³

Overall, the study underscores that socioeconomic disparities remain a key determinant of prescribing patterns in India. While emergency and critical care remain SES-neutral due to ethical imperatives of saving life, chronic and elective care are significantly shaped by affordability. Strengthening social insurance coverage, improving access to essential medicines, and fostering trust in generic formulations are crucial policy measures. Additionally, sensitizing medical students to social determinants of health can align pharmacological education with the broader goal of rational and equitable drug use.

CONCLUSION

This study highlights that patient’s SES significantly influences physician’s prescribing behaviours particularly in chronic and critical care settings. While clinician’s efforts to maintain ethical standards and ensure equitable treatment, affordability often states therapeutic decisions and medication adherence. Despite awareness of cost-effective options like generic drugs, scepticism regarding their quality persists. Strengthening government initiatives, regulatory oversight and pharmacoeconomic

education can enhance accessibility and confidence in rational prescribing. Ultimately, integrating socioeconomic sensitivity into clinical practice and medical education is essential to promote a valid patient centric pharmacological care across all healthcare settings.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee from Sri Siddhartha Medical College (Ref.No: SSMC/MED/IEC-093/March-2024)

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Cite this article as: Jayakumar B, Muthahanumaiah NMK, Thimmegouda N, Reddy PPK. Impact of patient's socioeconomic status on drug prescribing decisions among physicians: a qualitative analysis. *Int J Basic Clin Pharmacol* 2026;15:707-11.