Investigation of Prescribing Patterns and Rationality in Selected Hospitals of Dhaka city, Bangladesh: a Cross-Sectional Study

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ABSTRACT: Irrational prescribing of medications is a major therapeutic issue in Bangladesh, which can result in various serious health complications. As prescriptions are essential for the rational use of medicines and play a vital role in disease treatment, this study sought to examine prescription patterns across different hospitals in Dhaka city, Bangladesh. Between July and December, 2024 a random sample of 400 prescriptions was collected from 4 (four) hospitals in Dhaka, Bangladesh. The data were analyzed using IBM SPSS (Statistical Package for the Social Sciences) and are displayed as frequencies, means, and percentages. The majority of patients were aged 21-40 years, with a balanced gender distribution. Commonly prescribed drugs included proton pump inhibitors, antibiotics, and respiratory agents, with Montelukast and Deflazacort being the top generics. Males received more analgesics and antibiotics, while females were prescribed more proton pump inhibitors and anti-diabetic drugs. Government institutions prescribed a broader range of medications, while non-government ones focused on specialized treatments. This study highlights that physicians' prescribing practices significantly affect factors such as the frequency of doctor visits, medication choices, polypharmacy, rational antibiotic use, and gender biases. To improve health outcomes in Bangladesh, it is essential to establish rational prescribing guidelines and offer adequate training to healthcare professionals.

Key words: Prescribing patterns, rational drug use, medication safety, hospital, Dhaka city.

INTRODUCTION

The rational use of medicines is crucial for optimizing healthcare outcomes, minimizing adverse effects, and ensuring cost-effectiveness in medical treatment.[1,2] However, the inappropriate prescribing of medications, including over-prescription, under-prescription, or the use of unnecessary or ineffective drugs, remains a significant concern worldwide.[3,4] In the developing countries like Bangladesh, where healthcare resources are often limited, addressing the challenges in prescribing practices is vital to improve the overall health system and patient care.[5]

Dhaka, the capital city of Bangladesh, is home to numerous public and private hospitals, serving a large and diverse population.[6,7] These hospitals face immense pressure to provide adequate healthcare services, which can sometimes lead to suboptimal prescribing behaviors.[8,9] There is an increasing need to investigate the prescribing patterns in these hospitals to assess whether they align with established guidelines, scientific evidence, and best practices.[10]

Prescribing patterns encompass various aspects, such as the selection of drugs, their dosages, duration of treatment, and the use of generic versus brand-name drugs.[11-13] A rational prescribing practice ensures that drugs are prescribed in a manner that maximizes therapeutic outcomes while minimizing risks to patients.[14] Moreover, it contributes to the rational allocation of resources, which is particularly crucial in resource-constrained settings.[14]

Despite its significance, there is a paucity of comprehensive studies on prescribing patterns and their rationality in Bangladesh, particularly in Dhaka's hospitals.[15,16] This gap in research presents a pressing need to examine the current prescribing

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trends and to evaluate their alignment with the principles of rational drug use. Such an investigation could offer valuable insights into the factors influencing prescribing behaviors, the adequacy of existing protocols, and the potential areas for improvement in healthcare delivery.[16,17]

The aim of this cross-sectional study was to investigate the prescribing patterns and the rationality of drug prescriptions in selected hospitals in Dhaka City, Bangladesh. This research evaluated the extent to which current prescribing practices adhere to rational drug use principles and provide recommendations to enhance prescribing quality.

MATERIALS AND METHODS

Study design and setting. This was a cross-sectional observational study conducted over a period of 6 months in 4 selected public and private hospitals within Dhaka city, Bangladesh. The study aimed to assess the prescribing patterns and the rational use of medicines based on standard World Health Organization (WHO)/ International Network for the Rational Use of Drugs (INRUD) prescribing indicators.

Sample size and sampling technique. A total of 400 prescriptions were randomly collected from the outpatient departments (OPDs) of 4 hospitals in Dhaka City. A simple random sampling technique was employed to minimize selection bias, enhance representativeness, and ensure that the findings could be generalized to the broader patient population in the selected hospitals.

Inclusion and exclusion criteria

Inclusion. All prescriptions for patients attending the OPD during the study period, regardless of age or gender.

Exclusion. Incomplete prescriptions, repeat visits, or emergency department prescriptions were excluded.

Ethical consideration. Approval for the study was obtained from the Ethical Review Committee of the World University of Bangladesh (WUB/EC/2024/010). Verbal consent was taken from patients or guardians where necessary. Patient anonymity and confidentiality were strictly maintained throughout the study.

Data analysis. All necessary prescription data was manually input into Microsoft Excel, and each data point was given a numerical value. Using the MedEasy, MedEx, and DIMS (Drug Information Management System) apps, the generic names and therapeutic classifications of the medications were determined. For this information, the websites of some pharmaceutical manufacturers were also examined. IBM SPSS (Statistical Package for the Social Sciences) version 28 was then used to analyze the data once it had been imported from Microsoft Excel. To comprehend the prescription trends, a number of characteristics were examined, such as participant demographics, the quantity of medications prescribed, antibiotic types, therapeutic drug classes, and the most popular generic medications across all categories. Prescription trends by age group, hospital departments, gender, and type of institution were also assessed.

RESULTS AND DISCUSSION

This section presents the findings of the study, focusing on patient demographics, prescribing patterns, and drug utilization trends. The results were analyzed in comparison with relevant national and international studies, and statistical tests were applied to examine associations between variables.

The demographic data of the sample patients shows that the majority of participants were in the 21-40 age group, comprising 46.75% of the total. The second largest group was the 41-60 age range at 23.75%, followed by the 0-20 age group at 16.25%. The elderly population (above 60 years) accounted for 13%. In terms of gender, the sample was fairly balanced, with 51.5% male and 48.5% female patients.

The demographic profile of our study, with a majority of participants aged 21–40 years (46.75%) and a nearly equal gender distribution (51.5% male, 48.5% female), aligns with findings from previous research. For instance, a study on traumatic brain injury patients reported that a significant proportion were within the 21–40 age group, highlighting the prevalence of younger adults in clinical populations.[18] Additionally, similar gender distributions have been observed in other studies, indicating a balanced representation across sexes.[19]

These parallels suggest that our sample's demographic characteristics are consistent with broader clinical research trends, supporting the generalizability of our findings.

The chi-square test results ($\chi^2 = 0.0119$, $p = 0.9997$) indicate no significant association between age group and gender in the dataset. This suggests that the distribution of males and females across different age groups is statistically similar (Table 1).

Table 1. Demographic information of sample patient.

Characteristics	Frequency (%)
Age group	
-	1 (0.25%)
0-20	65 (16.25%)
21-40	187 (46.75%)
41-60	95 (23.75%)
Above 60	52 (13.00%)
Gender	
Male	206 (51.5%)
Female	194 (48.5%)

Chi-square test results: $\chi^2 = 0.0119$, $p = 0.9997$.

The distribution of the number of medicines prescribed per prescription shown in the Table 2 that the most common prescription involved 4 medicines (22.5%), followed by 8 or more medicines (20.25%). Other frequently prescribed quantities include 3 medicines (17.25%) and 5 medicines (18%). Fewer prescriptions contained 6 medicines (9.75%), 1 or 2 medicines (6.25%), or 7 medicines (6%). This indicates a tendency towards prescribing multiple medications, with 4 and 8 or more medicines being the most prevalent.

Table 2. Number of medicines prescribed per prescription.

Number of medicines	Frequency (%)
1 or 2	25 (6.25%)
3	69 (17.25%)
4	90 (22.50%)
5	72 (18.00%)
6	39 (9.75%)
7	24 (6.00%)
8 or more	81 (20.25%)

Chi-square test results: $\chi^2 = 0.287$, $p \approx 1.00$.

The average number of medicines prescribed per prescription was 5.14, with a median of 5 and a mode of 4. This indicates that most prescriptions contained around four to five medicines, reflecting a significant level of polypharmacy (a prescription containing ≥ 5 drugs). This is considerably higher than the WHO's recommended range of 1.6–1.8 drugs per encounter, and also exceeds findings from similar local studies. For example, Sultana *et al.* (2015) and Datta *et al.* (2016) reported average drug counts per prescription of around 4.89 and 3.36 respectively,[20,21] suggesting a growing trend of multiple drug use that may increase the risk of drug-drug interactions and reduced adherence to prescribed treatment regimen.

The chi-square test ($\chi^2 = 0.287$, $p \approx 1.00$) indicates no significant association between age group and the number of medicines prescribed per prescription. This suggests that the distribution of prescribed medicines is consistent across different age groups, with no particular group receiving significantly more or fewer medications (Table 2).

The analysis showed that proton pump inhibitors (PPIs) were the most commonly prescribed drugs, accounting for 260 prescriptions (65%), followed by antibiotics at 204 prescriptions (51%). The high rate of proton pump inhibitor (PPI) prescriptions (65%) is consistent with previous observations in Bangladeshi hospital settings, where PPI overuse has been flagged as a common issue.[22-24] Given that PPIs are often used empirically, their excessive use may not always be clinically justified and raises concerns about irrational prescribing.

Other frequently prescribed classes included respiratory agents (154 prescriptions, 38.5%), anti-histamines (148 prescriptions, 37%), and vitamins & minerals (111 prescriptions, 27.75%). Analgesics and nasal preparations were also common, prescribed in 107 (26.75%) and 101 (25.25%) cases, respectively. Less frequently prescribed drugs included anxiolytic agents (86 prescriptions, 21.5%), motility stimulants (75 prescriptions, 18.75%), and cardiovascular agents (62 prescriptions, 15.5%). Vaccines were prescribed 61 times (15.25%), and steroids were prescribed in 44 cases (11%).

The chi-square goodness-of-fit test ($\chi^2 = 468.97$, $p < 0.0001$) revealed a highly significant difference in prescription frequencies, indicating that some drug classes, such as Proton Pump Inhibitors and Antibiotics, are prescribed more frequently than others (Table 3).

Table 3. Therapeutic classes of drug prescribed.

Therapeutic classes of drugs	Frequency (%)
Proton Pump Inhibitors	260 (65.00%)
Antibiotics	204 (51.00%)
Respiratory agents	154 (38.50%)
Anti-histamines	148 (37.00%)
Vitamin & minerals	111 (27.75%)
Analgesics	107 (26.75%)
Nasal preparations	101 (25.25%)
Anxiolytic agents	86 (21.50%)
Motility Stimulants	75 (18.75%)
Cardiovascular agents	62 (15.50%)
Vaccines	61 (15.25%)
Anti-diabetic agents	30 (7.50%)
Steroids	44 (11.00%)

Chi-square goodness-of-fit test results: $\chi^2 = 468.97$, $p < 0.0001$.

Table 4. Most commonly prescribed generic drugs.

Therapeutic classes of drugs	Generic names of drugs	Frequency (%)
Proton Pump Inhibitors	Esomeprazole	144 (55.38%)
Antibiotics	Cefuroxime + Clavulanic acid	69 (33.82%)
Anti-histamines	Bilastin	42 (28.37%)
Vitamin and Minerals	Calcium + Vitamin D	35 (31.53%)
Respiratory agents	Montelukast	147 (95.45%)
Analgesics	Paracetamol	65 (60.75%)
Steroids	Deflazacort	40 (90.90%)
Anxiolytic agents	Clonazepam	28 (32.56%)
Cardiovascular agents	Furosemide + Spironolactone	14 (22.58%)

Chi-square goodness-of-fit test results: $\chi^2 = 292.88$, $p < 0.0001$.

The analysis of commonly prescribed generic drugs revealed that Montelukast was the most frequently prescribed, accounting for 95.45% of prescriptions. Other highly prescribed drugs included Deflazacort (90.90%), Paracetamol (60.75%), and Esomeprazole (55.38%). Antibiotic combinations like Cefuroxime + Clavulanic acid were prescribed in 33.82% of cases, while other drugs such as Calcium + Vitamin D (31.53%), Clonazepam (32.56%), Bilastin (28.37%), and Furosemide + Spironolactone (22.58%) showed lower prescription frequencies. This distribution reflects a focus on treatments for respiratory conditions, inflammation, and pain management in the studied population.

The antibiotic prescription rate of 51% found in this study is particularly concerning. This figure is substantially higher than the WHO standard, which recommends that antibiotics should be prescribed in less than 30% of outpatient encounters. This trend mirrors earlier findings in other studies, who reported similarly high antibiotic usage in both urban and rural health facilities in Bangladesh.[25,26] Such overprescribing significantly contributes to the growing threat of antimicrobial resistance (AMR).

The chi-square goodness-of-fit test ($\chi^2 = 292.88$, $p < 0.0001$) indicates a highly significant difference in prescription frequencies among generic drugs. This suggests that certain drugs, such as Montelukast and Esomeprazole, are prescribed far more frequently than others (Table 4).

The prescribing patterns according to gender revealed several key differences. Males were more likely to receive analgesics (53.27%) and antibiotics (56.86%), while females were more frequently prescribed proton pump inhibitors (51.15%),

Table 5. Prescribing pattern according to the gender.

Therapeutic classes of drugs	Male (%)	Female (%)
Analgesics	57 (53.27%)	50 (46.72%)
Proton pump inhibitor	127 (48.85%)	133 (51.15%)
Vitamin & Minerals	56 (50.45%)	55 (49.55%)
Anxiolytic agent	40 (46.51%)	46 (53.49%)
Cardiovascular agent	26 (41.94%)	36 (58.06%)
Respiratory agent	72 (46.75%)	82 (53.25%)
Anti diabetic	11 (36.67%)	19 (63.33%)
Antibiotics	116 (56.86%)	88 (43.13%)
Steroids	21 (47.73%)	23 (52.27%)
Anti Histamine	78 (52.70%)	70 (47.30%)

ANOVA test results: F-statistic = 1.975, p-value = 0.177.

anxiolytic agents (53.49%), cardiovascular agents (58.06%), and anti-diabetic drugs (63.33%). Respiratory agents (53.25%) and steroids (52.27%) were also prescribed more often to females. The prescription of vitamins and minerals was nearly balanced (50.45% for males and 49.55% for females), while anti-histamines were more common among males (52.70%). These findings suggest that gender-specific health conditions influenced prescribing patterns, with males receiving more prescriptions for acute conditions and females for chronic diseases.

Gender-specific analysis revealed that males were more likely to receive analgesics, antibiotics, and antihistamines, often associated with acute conditions, while females were more frequently prescribed PPIs, anxiolytics, cardiovascular agents, and anti-diabetic drugs, typically used in chronic disease management. These findings align with Asaduzzaman *et al*. (2025), who observed a similar gender-based distinction in prescription trends, and further support the notion that prescribing practices may be influenced by gender-linked disease prevalence and health-seeking behavior.[27]

The ANOVA test yielded an F-statistic of 1.975 and a p-value of 0.177, indicating no statistically significant difference between male and female patients. This suggests that gender does not play a significant role in the distribution of prescribed medications among the participants (Table 5).

Table 6. Prescribing pattern according to the type of institutions.

Therapeutic classes of drugs	Govt.	Non-Govt.
Analgesics	63 (58.88%)	44 (41.12%)
Proton pump inhibitors	151 (58.08)	109 (41.92%)
Vitamin & Minerals	60 (54.05%)	51 (45.95%)
Anxiolytic agents	44 (51.16%)	42 (48.84%)
Cardiovascular agents	11 (17.75%)	51 (82.25%)
Respiratory agents	103 (66.88%)	51 (33.12%)
Anti diabetics	6 (20.00%)	24 (80.00%)
Antibiotics	103 (50.49%)	101 (49.51%)
Steroids	1 (0.22%)	43 (99.78%)
Anti-histamines	69 (46.62%)	79 (53.38%)

ANOVA test results: F-statistic = 2.409, p-value = 0.138.

In government institutions, the most frequently prescribed drugs are respiratory agents (66.88%), proton pump inhibitors (58.08%), and analgesics (58.88%). Government hospitals also show a

significant prescription of anti-histamines (46.62%) and antibiotics (50.49%). On the other hand, non-government institutions tend to prescribe cardiovascular agents (82.25%), anti-diabetic drugs (80%), and steroids (99.78%) more frequently. Non-government institutions also show a higher preference for anxiolytic agents (48.84%) and anti-histamines (53.38%) compared to government institutions. In contrast, government institutions are more likely to prescribe vitamin, calcium, and mineral combined preparations (54.05%). Overall, non-government institutions have a greater tendency to prescribe drugs for specialized conditions like steroids and anti-diabetic drugs, while government institutions have a broader prescribing range, especially for common conditions like respiratory issues, pain, and gastrointestinal problems.

Government institutions showed a broader range of prescriptions, including medications for symptomatic relief such as analgesics and respiratory agents. In contrast, private hospitals more frequently prescribed specialized medications, such as steroids, cardiovascular, and anti-diabetic drugs. This pattern aligns with findings from Samad *et al.* (2024), who highlighted that private institutions often manage more specialized or chronic cases and thus tend toward different prescribing profiles.[10] Another survey conducted in Bangladesh also showed difference in prescribing pattern between public and private hospitals.[28]

The ANOVA test yielded an F-statistic of 2.409 and a p-value of 0.138, indicating no statistically significant difference between the two institution types. This suggests that the distribution of prescribed medications does not vary significantly based on whether the institution is government or non-government (Table 6).

Table 7. Prescribing pattern according to age.

Name of class of drug	0-20y	21-40y	41-60y	Above 60y
Analgesics	17 (15.89%)	65 (60.75%)	17 (15.89%)	8 (7.47%)
Proton pump inhibitors	28 (10.77%)	127 (48.85%)	66 (25.38%)	39 (15.00%)
Vitamin & Minerals	7 (6.31%)	58 (52.25%)	22 (19.82%)	24 (21.62%)
Anxiolytic agents	7 (8.14%)	40 (45.51%)	28 (32.56%)	11 (12.79%)
Cardiovascular agents	1 (1.61%)	15 (25.81%)	21 (33.87%)	25 (40.32%)
Respiratory agents	24 (15.58%)	63 (40.91%)	39 (25.32%)	28 (18.18%)
Anti diabetics	0 (0.00%)	8 (26.67%)	10 (33.33%)	12 (40.00%)
Antibiotics	48 (23.53%)	80 (38.83%)	52 (25.49%)	24 (15.58%)
Steroids	4 (9.09%)	21 (47.73%)	8 (18.18%)	11 (25.00%)
Anti-histamines	43 (29.05%)	66 (44.59%)	32 (21.62%)	7 (4.73%)

ANOVA test results: $F = 17.902$, $p < 0.001$.

Analgesics were most commonly prescribed to individuals aged 21-40 years (60.75%), while proton pump inhibitors were also frequently prescribed to this group (48.85%). Vitamins and minerals had the highest prescription rate in the 21-40 years group (52.25%), and anxiolytics were most common in the same age range (45.51%). Cardiovascular agents were primarily prescribed to those above 60 years (40.32%), and respiratory agents were most often given to the 21-40 years group (40.91%). Anti-diabetic drugs were predominantly prescribed to individuals aged above 60 years (40.00%), while antibiotics were most frequently prescribed to the 21-40 years group (38.83%). Steroids had the highest prescription rate in the 21-40 years group (47.73%), and antihistamines were most commonly prescribed to those aged 0-20 years (29.05%). These trends reflect the varying health needs of each age group.

Age-based prescription trends also reflected rational tendencies in some areas. Anti-diabetics and cardiovascular agents were more commonly prescribed to older adults, while younger patients (particularly 21–40 years) received more medications overall, including antibiotics and PPIs. These findings are in line with prior reports indicating that prescribing is often influenced by age-specific morbidity patterns.[29,30]

The ANOVA test results showed a significant variation among age groups ($F = 17.902$, $p < 0.001$), indicating that age has a substantial influence on the distribution of prescribed medications. This suggests that certain drug classes are more commonly prescribed to specific age groups, reflecting age-related differences in medical needs and treatment approaches (Table 7).

Table 8. Prescription pattern in different departments.

Name of class of drug	Gastroenterology	Chest Medicine	Medicine	ENT
Analgesics	15 (14.02%)	7 (6.54%)	51 (47.66%)	34 (31.78%)
Proton pump inhibitors	68 (26.15%)	80 (30.77%)	82 (31.54%)	30 (11.54%)
Vitamin & minerals	34 (30.63%)	25 (22.52%)	50 (45.05%)	2 (1.80%)
Anxiolytic agents	23 (26.74%)	29 (33.72%)	25 (29.07%)	9 (10.47%)
Cardiovascular agents	23 (37.07%)	31 (50.00%)	8 (12.90%)	0 (0.00%)
Respiratory agents	5 (3.25%)	93 (60.39%)	25 (16.23%)	31 (20.13%)
Anti-diabetic agents	13 (43.33%)	12 (40.00%)	5 (16.67%)	0 (0.00%)
Antibiotics	28 (13.73%)	39 (19.18%)	50 (24.51%)	87 (42.65%)
Steroids	0 (0.00%)	40 (90.91%)	1 (2.27%)	3 (6.82%)
Anti-histamines	2 (1.35%)	46 (31.08%)	32 (21.62%)	68 (45.95%)

Chi-square test results: $\chi^2 = 428.03$, $df = 27$, $p < 0.001$.

The prescription patterns across departments revealed distinct preferences for certain drug classes. Analgesics were most prescribed in Medicine (47.66%) and ENT (31.78%) departments. Proton pump inhibitors were commonly used in Medicine (31.54%) and Chest Medicine (30.77%), while vitamins and minerals were frequently prescribed in Gastroenterology (30.63%) and Medicine (45.05%) departments. Anxiolytic agents were most common in Chest Medicine (33.72%) and Gastroenterology (26.74%) departments. Cardiovascular agents were largely prescribed in Chest Medicine (50%) and Gastroenterology (37.07%), while respiratory agents dominated in Chest Medicine (60.39%) departments. Anti-diabetic drugs were common in Gastroenterology (43.33%) and Chest Medicine (40%) departments. Antibiotics were primarily prescribed in ENT (42.65%), and steroids were mostly used in Chest Medicine (90.91%) departments. Lastly, anti-histamines were most frequent in ENT (45.95%) department. These patterns reflect the conditions treated within each department (Table 8).

The prescription patterns observed across various departments in our study align with findings from previous research, underscoring department-specific therapeutic focuses. For instance, the high utilization of proton pump inhibitors (PPIs) in the Medicine department (31.54%) mirrors trends reported in Bangladesh, where esomeprazole and omeprazole are frequently prescribed, often for conditions like heartburn and upper abdominal discomfort.[23] Similarly, the predominant prescription of antibiotics in the ENT department (42.65%) corresponds with studies indicating that over 93% of ENT prescriptions in Dhaka included antibiotics, primarily for managing infections.[31] The notable use of anti-diabetic medications in Gastroenterology (43.33%) and Chest Medicine (40%) departments aligns with research highlighting metformin as the most commonly prescribed anti-diabetic drug in Bangladesh, reflecting the prevalent management of diabetes in these specialties.[32,33] These parallels suggest that our findings are consistent with established prescribing trends in similar clinical settings.

A Chi-square test was conducted to examine the association between drug classes and hospital departments. The analysis revealed a statistically significant relationship ($\chi^2 = 428.03$, $df = 27$, $p < 0.001$), indicating that the distribution of prescribed drug classes varied significantly across the different departments. The observed frequencies deviated notably from the expected values, suggesting distinct prescribing patterns in each department. These findings highlights that certain drug classes were preferentially prescribed depending on the department, reflecting differences in departmental focus and patient health profiles.

Overall, while certain prescribing behaviors observed in this study reflect rational use based on patient age or diagnosis, the high rates of polypharmacy, antibiotic overuse (51% of encounters), and variability across institutions suggest that more standardized and evidence-based prescribing practices are needed. Training programs for physicians, pharmacists, and other healthcare professionals-focusing on rational prescribing, antibiotic stewardship, polypharmacy management, and evidence-based treatment guidelines-along with regular prescription audits and adherence to national protocols, can play a crucial role in improving rational drug use in both public and private sectors.[26,34,35]

CONCLUSION

This study highlights key issues in prescribing patterns in Dhaka City, Bangladesh, including the frequent use of proton pump inhibitors, antibiotics, and respiratory agents, as well as the high prevalence of polypharmacy. Analgesics and antibiotics were more commonly prescribed to male patients, while female patients were more likely to receive proton pump inhibitors and anti-diabetic drugs. Additionally, there was a notable difference in prescribing habits of physicians between government and non-government hospitals, with the latter focusing more on specialized treatments, likely due to a higher proportion of chronic and complex cases being managed in private facilities. These findings point to the need for improved prescribing practices to reduce the risks of polypharmacy, drug interactions, and antibiotic resistance. Establishing rational prescribing guidelines and providing further education to healthcare professionals are essential to ensure better patient outcomes. By understanding these patterns, policymakers, healthcare providers, and stakeholders can work towards improving prescribing practices, promoting patient safety, and optimizing healthcare costs in the region. The findings from this study will contribute to the ongoing efforts to improve healthcare standards in Bangladesh, ensuring that patients receive the right medications in the right doses for the right duration, and at an affordable cost. Overall, promoting rational drug use and standardizing prescribing practices can significantly improve quality of healthcare services and medication safety in Bangladesh.

AUTHOR CONTRIBUTION AND FUNDING

Prescriptions were collected by Md. Abu Talha. The study design and draft preparation were conducted by Md. Tarekur Rahman. Data analysis was performed by Md. Abu Talha and Md. Tarekur Rahman. The draft was proofread by all the authors. The study received no external funding.

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DISCLOSURE STATEMENT

The authors declare that there is no conflict of interest.

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