



Original Research Article

Assessment of Knowledge Regarding Commonly Prescribed Drugs Among Dental Students

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Abstract: Introduction: The prescription of drugs such as antibiotics, analgesics, antifungals, and anti-inflammatory agents is a fundamental responsibility of dental practitioners and requires sound knowledge of pharmacology, dosage, drug interactions, and adverse effects. Inappropriate prescribing compromises therapeutic efficacy and contributes to adverse drug reactions and antimicrobial resistance, representing a major global health concern. Prescribing habits are formed during undergraduate training; therefore, dental students' knowledge and attitudes toward rational drug use are crucial. However, studies from India and other countries report significant gaps in students' understanding of drug posology, adverse effects, allergy assessment, and adherence to World Health Organization prescribing guidelines, particularly for analgesics and antibiotics. These persistent deficiencies highlight the need for systematic evaluation and targeted educational interventions to promote safe, effective, and evidence-based dental prescribing practices. The aim of the study was to assess existing knowledge regarding drug prescription among 3rd, 4th BDS students and interns and to expand their knowledge related to drug prescription.

Methodology: A cross-sectional analytical study was conducted among approximately 370 third- and fourth-year BDS students and dental interns. Participants aged 20–30 years were recruited using convenience sampling. Data were collected over four months using a self-administered electronic questionnaire assessing drug prescription awareness. Descriptive statistics were used to summarize the data, and associations were analyzed using chi-square tests. Likert scale responses were evaluated using non-parametric tests, including the Mann–Whitney U test and Kruskal–Wallis ANOVA. **Results:** Among 377 BDS students (45.1% third year, 31% fourth year, 23.9% interns), pain was the most common clinical finding (34.2%). Professors were the main source of prescribing information (46.4%), and 58.4% were aware of WHO prescribing guidelines. Ibuprofen (35.5%) and paracetamol (34.5%) were the most commonly prescribed analgesics. Although most students considered both cause and pain while prescribing (59.9%), only 63.9% routinely inquired about drug allergies. Substantial gaps in prescription knowledge were identified, including incorrect dosages (41.9%), lack of brand-name awareness (42.7%), and uncertainty regarding drug choice (35.3%). Lack of confidence was most evident for prescription duration (29.4%), and over half of participants (57.6%) expressed the need for additional training. Awareness of WHO guidelines, prescribing confidence, and clinical practices improved significantly with academic progression ($p < 0.001$). Interns demonstrated significantly better allergy inquiry and self-rated diagnostic ability than junior

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students ($p < 0.001$). **Conclusion:** Despite this improvement, persistent deficiencies in rational prescribing highlight the need for enhanced pharmacology education and structured clinical training.

Keywords: Dental students; Drug prescription; Rational prescribing; Antimicrobial resistance; WHO prescribing guidelines; Analgesics; Antibiotics

INTRODUCTION

The prescription of drugs, including antibiotics, analgesics, antifungals, and anti-inflammatory agents, is a fundamental responsibility of dental practitioners. Rational prescribing requires adequate knowledge of pharmacology, dosage, drug interactions, and adverse effects(1). Inappropriate prescribing not only reduces therapeutic efficacy but also contributes to antimicrobial resistance and adverse drug reactions, posing a global health concern (2). Dental students acquire their prescribing habits during undergraduate and postgraduate training. Hence, their knowledge and attitudes toward rational prescribing are critical in shaping their future clinical practice(3). However, several studies have reported gaps in knowledge and confidence among dental students with respect to prescribing drugs(4),(5),(6), (7). A study in India reported that more than 30 % of dental students prescribed diclofenac and paracetamol for pain, but many lacked knowledge of drug posology and were unfamiliar with WHO prescribing guidelines(8). 13.53% of the students mentioned ketorolac as their first preference without knowing the long term nephrotoxicity of the drug(9). If antibiotics are prescribed unnecessarily with poor knowledge of dosage and prescription, they can cause toxicity and other adverse effects, such as allergic reactions, gastrointestinal problems, headaches, and neurologic symptoms and long term antimicrobial resistance(10). In Pakistan, studies have shown that many students fail to check drug allergies before prescribing, and almost half are unaware of WHO prescribing guidelines(11). Likewise, there is a uncertainty regarding drug dosage and brand names, with only 18% adhering to WHO prescribing recommendations (12). More recently, an institutional study highlighted that although most dental students were knowledgeable and confident regarding the prescription of antibiotics and analgesics, a subset lacked confidence, emphasizing the need for structured educational interventions (13). These findings collectively suggest that while dental students are exposed to pharmacology and prescribing during their curriculum, knowledge gaps and lack of adherence to rational prescribing guidelines persist(14). Assessing and addressing these gaps is vital to ensure safe, effective, and evidence-

based dental practice. The aim of the study was to Is to assess existing knowledge regarding drug prescription among 3rd, 4th BDS students and interns and to expand their knowledge related to pharmacological therapy. To develop some educational programs for students to develop better prescribing skills .

Methodology

This cross-sectional analytical study included approximately 370 participants, with the sample size estimated using the single proportion formula. The study population comprised third- and fourth-year BDS students and dental interns who were currently enrolled in their programs. Participants were recruited using convenient sampling over a period of approximately four months. Eligible participants were students aged between 20 and 30 years, proficient in English, regularly attending college, and belonging to institutions within the specified geographic region. Participation was voluntary, and only those who provided implied consent were included, while individuals not meeting the eligibility criteria were excluded. Data were collected using a pre-validated, self-administered electronic questionnaire distributed through Google Forms. The questionnaire, along with the implied consent form, was provided in English. Any modifications to the questionnaire were validated through a pilot survey prior to the main study. The survey collected information on basic personal characteristics and assessed awareness regarding drug prescription practices. Ethical approval for the study was obtained from the institutional ethical board (Phd/06/2024). Collected responses were compiled in a Microsoft Excel worksheet and subsequently subjected to statistical analysis using appropriate software such as SPSS. Descriptive statistics were computed and presented as frequencies and percentages for categorical variables, and as mean with standard deviation for numerical variables. Associations between responses and independent variables were analyzed using the chi-square test. Likert scale responses were numerically coded and compared using suitable non-parametric tests, including the Mann-Whitney U test for comparisons between two groups and the Kruskal-Wallis ANOVA for comparisons among more than two groups.

RESULTS

Table 1: Distribution of Responses on Prescription Knowledge, Practices, and Clinical Awareness

Question / Parameter	Response Options	Percentage (%)
Q1. Year of BDS	3rd Year	45.1
	4th Year	31
	Interns	23.9
Q2. Most Common Oral Finding	Infection	25.5
	Pain	34.2
	Swelling	18.6
	Ulcer	16.7
	Other	5
Q3. First Source of Prescription Information	Professor	46.4
	Pharmacology book	21.8
	Classmate	21.2
	Self-knowledge	10.6
Q4. Awareness of WHO Guidelines	Yes	58.4
	No	20.7
	Unaware	21
Q5. Analgesic Most Commonly Prescribed	Ibuprofen	35.5
	Paracetamol	34.5
	Diclofenac sodium	15.1
	Aspirin	1.1
	Ketorolac	8
	Other	5.8
Q6. Considerations While Prescribing	Dental pain only	21
	Cause only	19.1
	Cause + pain	59.9

Parameter	Yes (%)	No (%)
Incorrect prescription	30.8	69.2
Incorrect dosage	41.9	58.1
Lack of knowledge of brand names	42.7	57.3
Uncertainty about what to prescribe	35.3	64.7
Incorrect prescription duration	30.0	70.0

Q7. Asking About Drug Allergy	Never	5.6
	Sometimes	30.5
	Frequently	32.9
	Always	31
Q8. Self-Rating of Diagnostic Ability	Very poor	6.6
	Poor	19.1
	Fair	34.2
	Good	29.2
	Very good	10.9

Table 1 describes distribution of responses on prescription knowledge, practices, and clinical awareness. A total of 377 BDS students participated in the study, comprising 45.1% third-year, 31% fourth-year, and 23.9% interns. Pain (34.2%) was the most frequently reported oral finding, followed by infection (25.5%), swelling (18.6%), and ulcer (16.7%). Professors were the most common source of prescription-related information (46.4%), followed by pharmacology books (21.8%), classmates (21.2%), and self-learning (10.6%). More than half of the participants (58.4%) were aware of WHO prescribing guidelines, while 20.7% were unaware and 21% were uncertain. Ibuprofen (35.5%) and paracetamol (34.5%) were the most commonly prescribed analgesics, followed by diclofenac sodium (15.1%), ketorolac (8%), and aspirin (1.1%). Regarding prescribing considerations, 59.9% of students reported accounting for both the cause and pain, while 21% focused only on pain and 19.1% on cause alone. Inquiring about drug allergies was reported as “always” by 31% and “frequently” by 32.9%, while 30.5% did so sometimes and 5.6% never. Self-assessment of diagnostic ability showed that 34.2% rated themselves as fair, 29.2% as good, and 10.9% as very good, while 19.1% and 6.6% rated themselves as poor and very poor, respectively.

Table2: Distribution of Participants Based on Prescription Knowledge Parameters

Analysis of prescription knowledge parameters (table 2) revealed that 30.8% of respondents had made incorrect prescriptions, 41.9% prescribed wrong dosages, and 42.7% lacked knowledge of brand names. Additionally, 35.3% were uncertain about what to prescribe, and 30% admitted to errors in prescription duration.

Table 3: Confidence Level Regarding Prescription Parameters

Parameter	No (%)	Yes (%)
Not confident about prescription duration	70.6	29.4
Not confident about dosage frequency	76.7	23.3
Not confident in any prescription aspect	84.9	15.1

In terms of confidence (table 3), 29.4% were not confident about prescription duration, 23.3% lacked confidence in dosage frequency, and 15.1% were not confident in any aspect of prescribing.

Table 4: Students needing additional training

Parameter	Yes (%)	No (%)
Students reporting need for more training in prescription writing	57.6	17.2

More than half of the students (57.6%) expressed the need for additional training in prescription writing, emphasizing perceived gaps in competence and confidence (table 4).

The Chi-square test revealed a significant association between the year of study and awareness of WHO guidelines, $X^2(2, N = 377) = 23.49$, $p < .001$, indicating that awareness increased with academic progression. Fourth-year students showed the highest awareness, third-year students the lowest, and interns intermediate levels. Another Chi-square test showed a significant relationship between the year of study and lack of confidence regarding prescription duration, $X^2(2, N = 377) = 25.51$, $p < .001$, suggesting that confidence improved with advancement in the course. Similarly, a significant association was found between year of study and perceived need for additional training, $X^2(4, N = 377) = 18.59$, $p < .001$, with third-year students expressing the highest need for further training.

The Kruskal–Wallis test showed significant differences across the three academic groups for both the frequency of asking about drug allergies ($H(2) = 17.08$, $p < .001$) and self-rated diagnostic ability ($H(2) = 21.51$, $p < .001$). Post-hoc Dunn’s tests revealed that interns asked about drug allergies significantly more often than third-year students ($p < .001$, $rrb = 0.283$), and rated themselves significantly higher in diagnostic ability than both third-year ($p < .001$, $rrb = 0.325$) and fourth-year students ($p < .001$, $rrb = 0.285$). No significant differences were found between third- and fourth-year students after Bonferroni correction.

Overall, the findings indicate a progressive improvement in prescription knowledge, awareness of WHO guidelines, and clinical confidence as students advance through their BDS course. Nevertheless, gaps persist in areas such as dosage determination, brand-name familiarity, and consistent inquiry about drug allergies, highlighting the need for strengthened pharmacology education and structured clinical exposure in undergraduate dental training.

DISCUSSION

The present study assessed the knowledge, practices and clinical awareness of drug prescription among dental students across different academic years, showing significant variations in knowledge, level of confidence, and prescribing behaviours as students progressed through their BDS curriculum. Overall, the findings revealed a gradual improvement in awareness of WHO guidelines for prescription, confidence of diagnosis and rational drug use with increased academic years, aligning with previous studies that reported positive opinions regarding curricular content related to prescribing among senior dental and medical students due to increased clinical exposure and pharmacology reinforcement (15), (Kamarudin et al., 2013), (17)

higher among fourth-year students and interns compared to third-year students, suggesting that curriculum integration and clinical experience positively influence rational prescribing behavior. This contradicted the study done by Jain A et al where 55% of students were not aware about WHO guidelines(9)., In another study eighty percent of students were unknown about the WHO guide which highlighted that structured pharmacology teaching and supervised clinical practice enhance awareness and adherence to global prescribing standards(8). Despite this, over one-fifth of participants in the current study were still unaware of or uncertain about WHO guidelines, emphasizing the need for reinforcing this aspect through case-based and simulation-based learning.

Awareness of WHO guidelines was significantly

Today in the health care profession, varieties of

medication errors including missed dose, wrong dosage, wrong duration, wrong route, etc. are major challenges for better patient care. Errors related to dosage, brand knowledge, and prescription duration were frequently reported, consistent with previous research indicating that undergraduate dental students often face challenges translating theoretical prescription knowledge into clinical decision-making (18). Nearly 42% of participants lacked adequate knowledge of drug brand names, which could reflect limited exposure to clinical pharmacology in the early years of training. This underlines the importance of integrating drug formulary familiarization and real-world prescription exercises into the undergraduate curriculum.

Confidence in prescribing improved significantly with academic year, as reflected in both descriptive and inferential analyses. The Chi-square and Kruskal–Wallis tests demonstrated that interns were more confident in determining prescription duration and dosage, and more consistent in inquiring about drug allergies than third-year students. This finding aligns with studies by Persky et al. (2009) and Gibbs et al. (2019), who observed that clinical rotations and direct patient management build made students both competent and self-efficient in prescribing (19). However, the observation that around one-third of students lacked complete confidence indicates that experiential learning opportunities should begin earlier in the curriculum to bridge the theory–practice gap.

The significant difference in self-rated diagnostic ability across academic years further highlights the impact of clinical exposure. Interns rated themselves higher than both third- and fourth-year students, consistent with the progressive acquisition of diagnostic and therapeutic decision-making skills through hands-on practice. Nevertheless, a substantial proportion of students still expressed uncertainty about what to prescribe, suggesting gaps in clinical reasoning and judgment. As demonstrated in similar studies incorporating pharmacotherapeutic reasoning modules and feedback-based assessments could enhance confidence and rational prescribing ability (Cheung et al., 2025).

Interestingly, more than half of the participants (57.6%) expressed the need for additional training in prescription writing and drug selection, despite formal pharmacology instruction during undergraduate years. This self-perceived deficiency echoes findings from comparable Indian and international studies, where students reported that theoretical teaching often lacked clinical contextualization (21). Introducing prescription audit sessions, small-group case discussions, and interprofessional pharmacology workshops could strengthen applied learning and promote safe

prescribing habits.

These findings suggest that while clinical exposure and academic progression positively influence prescribing knowledge and confidence, persistent deficiencies remain in rational drug use and allergy inquiry practices. The results emphasise the need for a competency-based educational approach emphasizing early clinical integration, problem-based pharmacology, and continuous assessment. Reinforcement of WHO prescribing guidelines and practical prescription exercises at every academic level would be instrumental in enhancing prescription accuracy and patient safety among future dental practitioners.

The present study, though comprehensive, has certain limitations. As a cross-sectional survey, it captures responses at a single time point and therefore cannot establish causal relationships between academic progression and improvement in prescription competence. The study relied on self-reported data, which may be influenced by recall bias or social desirability bias, potentially leading to overestimation of confidence or awareness levels. Furthermore, the sample was restricted to students from one institution, limiting the generalizability of findings to other dental schools with differing curricula or teaching methodologies.

Future research should adopt a multicentric, longitudinal design to assess how structured interventions such as prescription workshops, simulated patient encounters, and continuous pharmacology integration influence knowledge retention and prescribing accuracy over time. Incorporating objective assessments—such as prescription audits, OSCE-based evaluations, and real-time clinical observation—would provide a more reliable measure of actual prescribing competence. Exploring faculty perspectives and curricular barriers to rational prescribing education could also guide the development of standardized, competency-based pharmacology modules across dental institutions.

Conclusion:

The present study demonstrated that dental students' knowledge, confidence, and prescribing practices improve progressively with academic advancement, reflecting the positive influence of clinical exposure and pharmacology reinforcement. However, notable deficiencies remain in rational drug use, awareness of WHO prescribing guidelines, and confidence in prescription writing and drug selection. These gaps highlight the need for curriculum strengthening through early clinical integration, problem-based pharmacology teaching, and hands-on prescription training. Implementing competency-based learning approaches, including case-based discussions, simulation exercises, and prescription audits, can

enhance students' clinical reasoning and promote safer, evidence-based prescribing habits. Future multicentric and longitudinal studies are recommended to evaluate the long-term impact of such interventions on prescription competence and patient safety among dental graduates.

References

- Allouch, S., Ali, R., Seed Ahmed, M., Akhtar, S., Awaisu, A., & Bidmos, M. (2024). Confidence in Prescribing Practices: Perspectives of Senior Medical Students and Recent Graduates at Qatar University. *Advances in Medical Education and Practice*, Volume 15, 1325–1337. <https://doi.org/10.2147/AMEP.S476352>
- Amjad S,. (2023). Evaluation of knowledge about drug prescription among dental students; an observational study. *Pakistan Oral & Dental Journal*. , 43(4), 199–204.
- Atif, M., Sarwar, M. R., Azeem, M., Naz, M., Amir, S., & Nazir, K. (2016). Assessment of core drug use indicators using WHO/INRUD methodology at primary healthcare centers in Bahawalpur, Pakistan. *BMC Health Services Research*, 16(1), 684. <https://doi.org/10.1186/s12913-016-1932-2>
- Badrov, M., & Tadin, A. (2024). Evaluating Knowledge, Self-Reported Confidence Levels, and Prescription Patterns among Dental Practitioners Regarding Analgesics in Dentistry: A Cross-Sectional Study. *Medicina*, 60(3), 467. <https://doi.org/10.3390/medicina60030467>
- Campbell SM, M. J. G. B. (2021). . Why compliance to national prescribing guidelines is important especially across sub-Saharan Africa and suggestions for the future. . *Journal of Biomedical Pharmaceutical Sciences.*, 4(6).
- Cheung, N. C., Quesnelle, K. M., Hung, H. S., Ikonne, U., Karkal, Y. R., Divis, D. D., Fasinu, P. S., Zagaar, M., Hosseinzadeh, M., Tally, T., & Eldeeb, K. (2025). Assessment of clinical pharmacology and competence during medicine clerkships. *British Journal of Clinical Pharmacology*. <https://doi.org/10.1002/bcp.70290>
- Doshi, A., Asawa, K., Bhat, N., Tak, M., Dutta, P., Bansal, T. K., & Gupta, R. (2017). Knowledge and Practices of Indian Dental Students Regarding the Prescription of Antibiotics and Analgesics. *Medicine and Pharmacy Reports*, 90(4), 431–437. <https://doi.org/10.15386/cjmed-768>
- Gibbs S. (2019). Biology of soft tissue repair: Gingival epithelium in wound healing and attachment to the tooth and abutment surface. . *Eur. Cells Mater.* , 14(38), 63–78.
- Giri, A. K., Chaudhary, M., Yadav, A. K., Shrestha, A., Bhagat, T., Agrawal, S. K., & Gautam, U. (2025). Knowledge and perception of antibiotic prophylaxis for dental procedures among Nepali dental students: a questionnaire-based study. *BMC Oral Health*, 25(1), 873. <https://doi.org/10.1186/s12903-025-06264-z>
- Goruntla, N., Ssesanga, J., Bommireddy, B. R., Thammisetty, D. P., Kasturi Vishwanathasetty, V., Ezeonwumelu, J. O. C., & Bukke, S. P. N. (2023). Evaluation of Rational Drug Use Based on WHO/INRUD Core Drug Use Indicators in a Secondary Care Hospital: A Cross-Sectional Study in Western Uganda. *Drug, Healthcare and Patient Safety*, Volume 15, 125–135. <https://doi.org/10.2147/DHPS.S424050>
- Haji, A., Azzo, C., Hallit, S., Salameh, P., Sacre, H., Abdou, F., Naaman, N., & Khabbaz, L. (2021). Assessment of drug-prescribing perception and practice among dental care providers: a cross-sectional Lebanese study. *Pharmacy Practice*, 19(1), 2234. <https://doi.org/10.18549/PharmPract.2021.1.2234>
- Jain, A., Bhaskar, D., Gupta, D., Khurana, R., Yadav, P., Garg, Y., & Jain, D. (2016). Knowledge regarding prescription of drugs among dental students: A descriptive study. *Journal of Basic and Clinical Pharmacy*, 7(1), 12. <https://doi.org/10.4103/0976-0105.170584>
- Kamarudin, G., Penm, J., Chaar, B., & Moles, R. (2013). Educational interventions to improve prescribing competency: a systematic review. *BMJ Open*, 3(8), e003291. <https://doi.org/10.1136/bmjopen-2013-003291>
- Medeiros, M., Guzman-Alvarez, Reyes-Lagunes, & Campos-Sepulveda. (2012). Knowledge of drug prescription in dentistry students. *Drug, Healthcare and Patient Safety*, 55. <https://doi.org/10.2147/DHPS.S30984>
- Miranda-Novales, M. G., Flores-Moreno, K., Rodríguez-Álvarez, M., López-Vidal, Y., Soto-Hernández, J. L., Solórzano Santos, F., & Ponce-de-León-Rosales, S. (2023). The Real Practice Prescribing Antibiotics in Outpatients: A Failed Control Case Assessed through the Simulated Patient Method. *Antibiotics*, 12(5), 915. <https://doi.org/10.3390/antibiotics12050915>
- Murdoch, A. I. K., Blum, J., Chen, J., Baziotis-Kalfas, D., Dao, A., Bai, K., Bekheet, M., Atwal, N., Cho, S. S. H., Ganhewa, M., & Cirillo, N. (2023). Determinants of Clinical Decision Making under Uncertainty in Dentistry: A Scoping Review. *Diagnostics*, 13(6), 1076. <https://doi.org/10.3390/diagnostics13061076>
- Park, J. S., Daniel, B. K., Wong, P. Y., Abbott, P. V., & Ngo, H. C. (2023). Dental students' knowledge of and attitudes towards prescribing medication in Western Australia. *European Journal of Dental Education*, 27(2), 287–295. <https://doi.org/10.1111/eje.12802>

18. Park, J. S., Li, J., Turner, E., Page, A., Kruger, E., & Tennant, M. (2020). Medication knowledge among dental students in Australia—a cross-sectional study. *Journal of Dental Education*, 84(7), 799–804. <https://doi.org/10.1002/jdd.12167>
19. Persky, A. M. (2009). An exercise prescription course to improve pharmacy students' confidence in patient counseling. *American Journal of Pharmaceutical Education*, 73(7), 118. <https://doi.org/10.5688/aj7307118>
20. Ravichandran H, G. D. (2020). Knowledge of drug prescription among dental students. . *Drug Invention Today*., 13(3).
21. Schwartz, A., Weiner, S. J., Harris, I. B., & Binns-Calvey, A. (2010). An Educational Intervention for Contextualizing Patient Care and Medical Students' Abilities to Probe for Contextual Issues in Simulated Patients. *JAMA*, 304(11), 1191. <https://doi.org/10.1001/jama.2010.1297>
22. Thomas, J. S., Koo, M., Shakib, S., Wu, J., & Khanal, S. (2014). Impact of a compulsory final year medical student curriculum on junior doctor prescribing. *Internal Medicine Journal*, 44(2), 156–160. <https://doi.org/10.1111/imj.12316>
23. Weiner, S. J. (2022). Contextualizing care: An essential and measurable clinical competency. *Patient Education and Counseling*, 105(3), 594–598. <https://doi.org/10.1016/j.pec.2021.06.016>