



Drug Prescribing Pattern in Dental Teaching Hospital

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The irrational use of drugs is a major problem of present day medical practice and its consequences include ineffective treatment, development of resistance to antibiotics, adverse effects and economic burden on patients and society. Even though, there are specific programs on rational use of drugs promoted by various national and international agencies but still irrational prescription is a common practice. Irrational drug combinations, counterfeit medicines, spurious medicines, banned lifestyle drugs and withdrawn drugs are still being prescribed by most of the trained physicians. Although, a number of studies have been undertaken to study the drug-prescribing pattern of physicians, but the data is scarce on the prescribing habits of dental practitioners (1). This short study was undertaken to audit the pattern of drug prescribing habits by Dental physicians in the OPD. Prescriptions were collected from Dr. Ziauddin Ahmad Dental College, Aligarh Muslim University, Aligarh, during the months of February to March 2007. The information was compiled, scored and analyzed in consultation with a dentist using WHO guidelines. The analysis was done as per VEN Method (2) and according to WHO basic drug indicators (3) for Number of drugs per prescription, Number of antibiotics per prescription, Number of drugs prescribed by generic name, Number of drugs prescribed from Essential Medicines List, Number of injections per prescription. The cost per prescription & commonly prescribed groups of drugs were also looked into. The most common groups of drugs prescribed by Dental Physicians were Antiseptics (49.8%), NSAIDs (23.2%), Antibiotics (32.6%) and Vitamins (3.6%). The most extensively prescribed drugs from each of the above groups were Betadine Gargle, Tablets Voveron, Novaclox and Basiton Forte, respectively. The average number of drugs prescribed per prescription was four. The average number of antibiotics per prescription was two. Since there is no hospital formulary, the prescription of drugs from the Indian list of Essential Medicines was studied. Only 25 % of drugs were prescribed from the Essential Medicines List while number of drugs prescribed by Generic Name was only four. The average cost incurred by the patient was 24.2 INR per day. After reviewing the above

prescriptions, it was found that the percentages of drugs prescribed from EML and by generic names were significantly low. The pattern of drug prescribing is not based on WHO criteria for rational use of drugs. The system is not at all evidence based. The most commonly antibiotic was a combination of Amoxicillin (250 mg) and Cloxacillin (250 mg) which is one of the commonest irrational combinations available in the Indian drug market (4). This all along with polypharmacy lead to economic burden on the patients and society and make healthcare unaffordable for the common Indian masses. An earlier study of drug utilization pattern in Dental OPD in New Delhi revealed the same pattern (1). It is thus necessary to make Dental physicians aware about the use of drugs from EMLs, importance of prescribing drugs with generic names and, for patients' point of view, the factor of cost-effectiveness. Also, there is a clear need for the development of prescribing guidelines and educational initiatives to encourage the rational and appropriate use of drugs in dentistry. Improvement through continuing education is desired on the part of prescribers to ensure a good standard of care and avoid practices that may increase antimicrobial resistance. Drug information services including side effects and drug interactions for professionals and consumers at the hospital are highly desirable. There is need of Continuing Dental Educations (CDEs) based on GCP and Standard Treatment Guidelines. Every institution must have its own 'Drugs and Therapeutic Committees' as per suggested by WHO.

References

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