

Evaluation of Interpretational Skills of Dental Panoramic Radiographs among Dental Specialists, Postgraduate Trainees, Undergraduates and General Dental Practitioners in Sri Lanka

C. Gunasena*, P.V.K.S. Hettiarachchi, R.M.S.H.B. Medawela and R.D. Jayasinghe

*Department of Oral Medicine and Periodontology, Faculty of Dental Sciences,
University of Peradeniya, Peradeniya 20400, Sri Lanka*

**cgunasena039@gmail.com*

Dental panoramic tomography (DPT), a commonly performed extra oral radiographic examination is an essential armamentarium that aids in the diagnosis, treatment planning, and assessment of prognosis of disorders of teeth and supporting structures. As this imaging modality results in the superimposition of the anatomical structures in the head and neck region, a thorough knowledge of the complex anatomy in this region is essential. Hence the present study aims to evaluate the knowledge level in different aspects of interpretation in DPT's among dental undergraduates and graduates in Sri Lanka. A cross-sectional descriptive study was performed, administering a questionnaire via the World Wide Web. Aspects of interpretational skills tested were anatomical landmarks, operator errors and pathologies. A total of 216 responses were obtained with female preponderance (females 132; males 84). 31.8% of respondents were general dental practitioners, 30.8% were undergraduates, 26.2 % were post-graduate trainees and 11.2% were consultants/ academics. Females scored more than males in all three aspects of the questionnaire (60.2 %, 57.9% and 59.7%). General dental practitioners had the highest average score among the four categories in all aspects of interpretation (anatomic landmarks: 30.7%, operator errors: 33.4% and pathologies: 31.3%). Comparison of scores among the different age groups revealed that the recently passed out graduates with 0-5 years' experience had the highest. Out of the sections in the questionnaire, 17% lacked knowledge in interpreting anatomical landmarks, 21.6% on operator errors and 26% on pathologies. These findings reveal that there is inadequate knowledge in the interpretation of anatomical landmarks and pathological lesions among the personnel in the Dental field in Sri Lanka. A reasonable number of participants showed a lack of knowledge in the interpretation of operator /positional errors in DPT's. Continuous dental education sessions in DPT's should be done with more weight on the interpretation of operator /positional errors in DPT's.

Keywords: Dental panoramic tomography, Dentistry, Oral radiology, Radiological interpretation