



KNOWLEDGE OF GENERAL PRACTICE DENTISTS IN ANDIJAN IN THE DIAGNOSIS, TREATMENT AND RISK ASSESSMENT OF PERIODONTAL DISEASES

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ABSTRACT

An experimental and revised questionnaire was sent to a random sample of 87 general dentists by email. The questionnaire consisted of 47 multiple-choice questions divided into three sections: general information, questions about the diagnosis and treatment of periodontal disease, and factors preventing or limiting access to periodontal treatment. The questionnaire was completed by 52 general dentists, the percentage of responses was 49.95%. The average age of the respondents was 37 years, with an average of 12.5 years in practice. 58% of respondents worked together with a dental hygienist; 29% have a periodontist in their practice.

Relevance: With red dental diseases, one of the first places in terms of frequency and prevalence is occupied by periodontal lesions - according to WHO, the incidence of gingivitis and periodontitis in different age groups reaches 80-100% [1]. The negative age-related dynamics of dental health actualizes the problem of concomitant pathology and requires constant monitoring of risk factors for inflammatory periodontal diseases [4 , 5 , 6]. The leading role in the formation of the inflammatory process in the oral cavity belongs to the resident obligate anaerobic and microaerophilic microflora, among which the most aggressive species have mechanisms that induce prolonged inflammation and destruction of the tissues of the gums and alveolar process. These are periodontopathogenic bacteria such as *Bacteroides melaninogenicus* , *Porphyromonas gingivalis* , *Prevotella intermedia* , as well as *Actinibacillus actinomicetemcomitans* , yeast-like fungi and mycoplasmas, *Neisseria* , etc. [3 , 7]. In recent years, opinions have often been expressed about the possibility of streptococci affecting periodontal tissues. It was found that *Streptococcus mitior tropen* to cheek epithelium, *Streptococcus salivarius* - to the papillae of the tongue, *Streptococcus sanguis* and *Streptococcus mutans* , to the surface of teeth [2 , 9]. According to epidemiological studies conducted in the city of Andijan, the prevalence of periodontitis ranges from 30 to 37% among patients aged 34–44 years and from 57 to 95% among patients aged 55 years and older. According to official statistics at the end of 2022, the city of Andijan had a population of about 700,000 and employed 18 periodontal specialists and 85 licensed general dentists.



Obviously, not all patients suffering from periodontitis are treated by specialists in periodontology and part of the burden falls on general dentists [8,10]. Unfortunately, it is not clear to what extent general dentists are familiar with new approaches to the diagnosis and treatment of periodontal disease or what oral care services, including periodontal care, they provide. To our knowledge, there are no previous studies on this aspect.

The purpose of the study: was to study the knowledge of general dentists in the city of Andijan about the methods of periodontal treatment for the diagnosis and approaches to the treatment of periodontal diseases.

Materials and Methods: This study was conducted as part of a regional study, the purpose of which was to study the current knowledge, diagnosis and treatment of periodontal diseases by general dentists in the city of Andijan. The questionnaire was pre-tested with a sample of 20 general dentists and then revised according to the comments. The confidence level was set at 95% and the confidence interval at 0.05. An oversampling of 300% was used to obtain the number of responses indicated by the power calculator. A sample of 87 people was randomly selected from a registry of dentists working in both public and private clinics. Respondents were considered to have agreed to participate in the survey if they completed the questionnaire. The survey was extended to a random sample in August 2022 with a reminder in September 2022. The questionnaire consisted of 47 multiple-choice questions divided into three blocks : general information about the prevalence of periodontal disease, questions about the diagnosis and treatment of periodontal disease, and factors preventing or limiting the availability of periodontal treatment.

Results: The questionnaire was completed by 52 general dentists, the response rate was 49.95%. 85% (44) of the respondents are men. The average age of the respondents was 37 years. The average experience of respondents is 12.5 years. The majority (86%) worked in public clinics. Respondents working only in private practice accounted for 14%. 58% of respondents worked with a dental hygienist in their practice, and 29% worked with a periodontist . Dentists working in public clinics were more likely to have a dental hygienist and periodontist in their practice ($p < 0.05$). 61.6% of respondents admitted that they do not conduct periodontal examinations for all their dental patients. 14% indicated that they perform a full periodontal examination on all of their dentition patients and record pocket probing depth measurements around all teeth. In addition, only a minority of general dentists (27.9%) perform selective partial periodontal examinations, such as assessment of pocket depth, attachment loss, in more than 50% of their patients. 30% of respondents asked a dental hygienist to evaluate and record pocket depth for them. 93% of general dentists take x-rays for periodontal diagnosis. Of these, 23.5% use only periapical , 33.7% only panoramic radiographs, and 43.9% use both periapical and panoramic radiographs for periodontal diagnosis. 75% of respondents do not register a family history of periodontal disease, and 36% of respondents admitted that they do not even always collect a complete history, including medications for all patients. Only 5% of respondents recorded the depth of periodontal pockets of all teeth, collected a complete medical and family history of periodontitis. 55% of respondents stated that they usually do not assess the periodontal risk of their patients. 85% of respondents said they give oral hygiene instructions, 71% teach flossing and 65% show how to use interdental brushes for most of their patients (over 50%).



21% of respondents reported that they never perform root debridement, and 20% of these GPs do not work with a dental hygienist. 45% of dentists never use local anesthesia for oral hygiene procedures. 16% perform periodontal surgery, the most common surgical services being gingivectomy and clinical crown lengthening (83% and 56% respectively); 11% carry out implant therapy. 82% reported having 0 to 5 periodontal procedures per week (both non-surgical and surgical). 27% of respondents never refer patients to a periodontist.

Conclusion: The results of this survey show that general dentists in the city of Andijan do not perform thorough diagnostics, perform very little periodontal treatment themselves, and are somewhat reluctant to refer patients to a periodontist. Guidelines for the diagnosis and treatment of periodontal disease can help general practitioners improve their periodontal care.

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