

PATIENT PERSPECTIVE ON ADHERENCE TO ORGANIZATIONAL PRINCIPLES IN DENTAL PRACTICE

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Abstract

The clinical activity in dental offices carries a heightened risk of pathogen transmission through direct contact with contaminated products, indirectly via instruments and equipment, and through cross-infection. This study aimed to evaluate patient perceptions of adherence to organizational principles in private dental practices. **Material and Methods:** To gauge public attitude and knowledge about the safety of medical procedures and infection control in dental offices, a questionnaire study was conducted with 75 patients undergoing dental treatments in two private clinics in Iași, aged between 20 and 75 years. **Results:** Patients believe they can contract diseases such as viral hepatitis B (76.3%), HIV infection (100%), viral hepatitis C (82.5%), viral hepatitis A (12.5%), influenza (96.5%), tuberculosis (23.7%), and chickenpox, smallpox, rubella (0.5 - 2.8%) during dental treatments. 96% of patients are unwilling to visit a dental clinic that previously treated an HIV-infected patient. 27% discussed with their dentist the risk of contracting diseases from dental treatments. 65.5% believe that a dentist infected with HIV can provide dental treatments if protective equipment (mask, gloves, glasses) is used. 100% agree that gloves and masks are essential for the dentist during treatment. **Conclusions:** Patients have a good understanding of the causes of infection transmission in dental clinics and how medical activities should be organized to reduce this risk. Continuous medical education and the implementation of specific programs should aim to increase compliance with infection control measures among both dentists and patients.

Keywords: patients, perspective, dental practice, organizational principles

Introduction

There are various factors influencing how individuals access health care, with some acting as barriers and others as facilitators to professional medical services (1). The perspectives of health care professionals play a significant role, as they determine the nature of care provided, while patients' views also impact the type of care received (2).

In dental offices, clinical activities pose a heightened risk of pathogen transmission, either directly through contact with contaminated products or indirectly via instruments and equipment, as well as through cross-infection. The increased microbial load associated with dental procedures amplifies the risk of infection during treatment. Often, the urgent nature of dental care necessitates

treating patients without prior thorough investigation, especially in procedures that involve bleeding, parenteral interventions, or incisions into purulent collections.

Assessing patients' attitudes and beliefs about dental care is crucial for understanding their needs, and such assessments are vital for evaluating the effectiveness of specific dental treatments (3). Patient satisfaction serves as an additional measure for evaluating the quality of health care services, including the processes and outcomes (4). By understanding patients' perspectives, dentists can improve public perceptions of the dental profession and enhance their interpersonal relationships with patients (5). Therefore, this study aimed to evaluate patients' perceptions of the adherence to

organizational principles in private dental practice.

Material and Methods

To assess the attitude and knowledge of the population regarding the safety of medical procedures through infection control in dental offices, we initiated a questionnaire-based study involving 75 patients who presented for dental treatments in two private clinics in Iași. The age of the patients ranged between 20 and 75 years.

The questionnaire included questions about attitudes towards measures for preventing blood-borne diseases (HIV, HBV, HCV) in dental offices, the use of protective equipment, the profile of the dentist, knowledge about diseases that can be transmitted during dental treatments and procedures with a higher risk of infection, the appearance of the clinic and the attire of the dentist, adherence to the patient's pathway in the clinic, and the use of all means to reduce the risk of infection transmission. The data were statistically processed using the SPSS.20 program ($p < 0.05$).

RESULTS

In processing the data from the questionnaire, individuals who did not respond to the questions were excluded. The response rate was 96%.

Based on the demographic characteristics of the study sample, the distribution was as follows: 41.54% were in the age group of 20-30 years, 28.46% in the age group of 31-45 years, 20.77% in the 45-60 year age group, and 9.23% were over 60 years old. Regarding gender distribution, the sample was balanced: 55.4% females and 44.6% males. 69% of the subjects came from urban areas. In terms of social employment status, 46.92% were employed, 19.23% were students, 16.15% were unemployed, and 17% were retirees (Table 1).

Table 1. Demographic characteristics of the study group

Age		
➤	20-30 years	41.54%
➤	31-45 years	27.46%
➤	45-60years	20.77%
➤	>60years	9.23%
Gender		
➤	Female	55.38%
➤	Male	44.62%
Residence		
➤	Urban	69.23%
➤	Rural	30.77%
Working status		
➤	Employed	46.92%
➤	Students	19.23%
➤	Unemployed	16.15%
➤	Retired	17.69%

Regarding the risk of illness in the dental office, patients believe that during dental treatments they can contract diseases such as viral hepatitis B (76.3%), HIV infection (100%), viral hepatitis C (82.5%), viral hepatitis A (12.5%), influenza (96.5%), tuberculosis (23.7%), and chickenpox, smallpox, rubella (0.5 - 2.8%). Notably, 96% of patients are reluctant to visit a dental clinic where an HIV-infected patient was previously treated.

Communication between the patient and dentist concerning the risk of infection transmission in dental practice is crucial in establishing the level of trust necessary for maintaining a collaborative relationship. Only 27% of patients have discussed with their dentist the risk of contracting blood-borne diseases during dental treatments, with women (60%) being more interested in communicating with their dentist on this topic. Patients in the 30-45 age group showed the highest interest in consulting educational materials in the clinic about infectious diseases with a risk of transmission during dental treatments.

Regarding the question of whether a dentist infected with HIV/HCV/HBV can perform dental treatments, 65.5% of subjects believe that a dentist infected with HIV can provide dental treatments if protective equipment (mask, gloves, glasses) is used. However, 44% of patients think that dentists infected with these viruses should be prohibited from

performing dental treatments. Similar results were obtained for situations involving dentists infected with HBV or HCV, where 56% of participants believe these professionals can work under the aforementioned conditions, while 42.4% feel they should not work at all.

The infectious status of patients must be considered when establishing a treatment plan. Often, patients do not disclose these conditions, complicating the optimal collaboration in the working relationship. Patients want to be treated regardless of their infectious status, considering this their right, provided that safety rules are followed. In our study, 83.2% of patients want the dentist to treat

patients infected with HIV, HBV, and HCV, using the same protective equipment. However, about 12% of patients argue that the dentist should not perform dental treatments because of the risk of contracting or transmitting HIV/HBV/HCV to other patients.

Regarding patients' preferences for protective equipment, 100% agree that gloves and masks are indispensable for the dentist during treatment. A significantly high proportion of patients also favor the use of protective glasses and caps (89% and 100%, respectively), believing these reduce the risk of transmitting diseases during treatment (Fig. 1, 2).

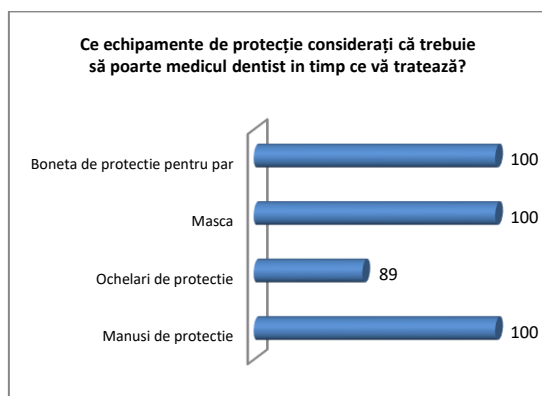


Figure 1. Distribution of responses to the question "What protective equipment do you think the dentist should wear while treating you?"

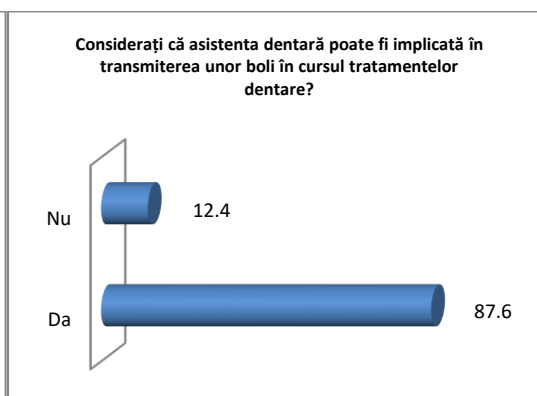


Figure 2. Distribution of responses to the question "Do you think the dental assistant can be involved in transmitting diseases during dental treatments?"

The level of knowledge among patients regarding the main procedures they consider important in preventing illness in a dental office is relatively modest. They believe that sterilizing instruments (100%), disinfecting surfaces (100%), and the

dentist washing their hands (86.2%) are crucial. However, there is less awareness about the importance of proper waste handling (47.5%) and syringe management (Fig. 3).

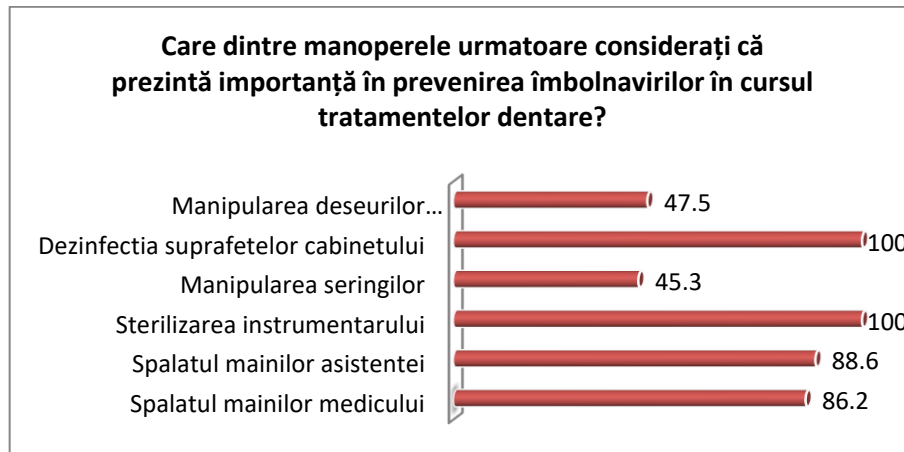


Figure 3. Patients' opinions on procedures to prevent illness.

The choice of a particular dental office depends on various criteria. Our study results indicate that 86% of participants believe that the appearance of the clinic is essential for the quality of dental treatments, while 13% think it has no relation to treatment quality. 86% trust that

the medical staff protects them from the transmission of general diseases, although only 5% do not consider themselves at risk of getting sick. There is also a 9% segment of patients who refuse dental treatments due to the fear of contracting a disease (Fig. 4).

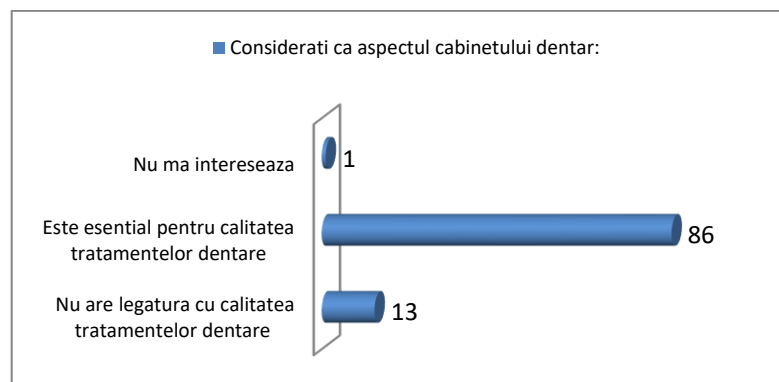


Figure 4. Patients' opinions on the appearance of the dental clinic.

In assessing the influence of the dentist's attire on patient confidence in their professional preparation, 2.6% of subjects considered this aspect to have no importance, while 62% believe that proper

attire increases confidence in the quality of medical care. Additionally, 97% of patients think that the use of protective equipment by the dentist reduces the risk of illness in the clinic (Fig. 5, 6).

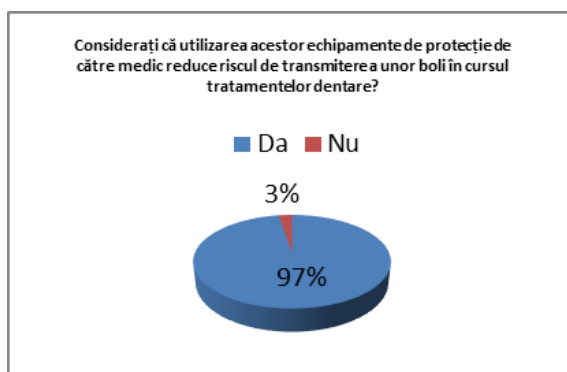


Figure 5. Impact of the dentist's attire on the patient's opinion regarding the safety of the medical procedure.

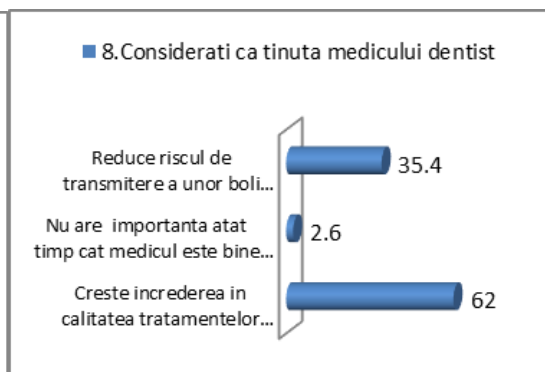


Figure 6. Patients' opinions on the risk of infection transmission related to the dentist wearing protective equipment.

Although all patients desire that dentists be assisted by a nurse, 87.6% of subjects believe that the assistant can be involved in the transmission of infection in the clinic. From their perspective, the assistant should wear a cap, gloves, and a mask with all patients.

When asked if they had observed the application of measures to prevent the

transmission of infectious diseases during dental treatments after each patient (changing the water cup, protective gloves, mask, disinfecting surfaces), 32% did not observe these procedures. An equal proportion either did not know details about this subject or observed these procedures, and 16% trust the medical staff's activities in this regard (Fig. 7).

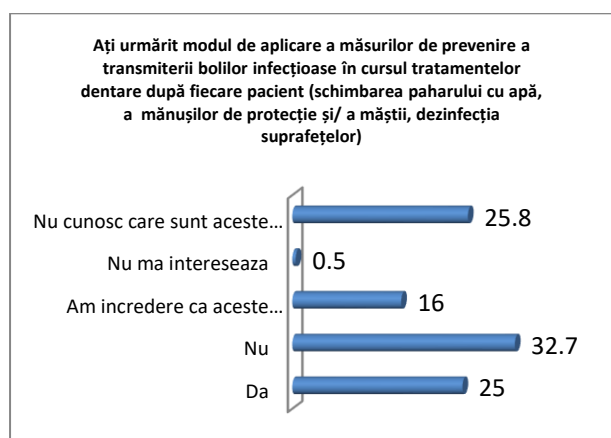


Figure 7. Patients' opinions on procedures to prevent the transmission of infection.

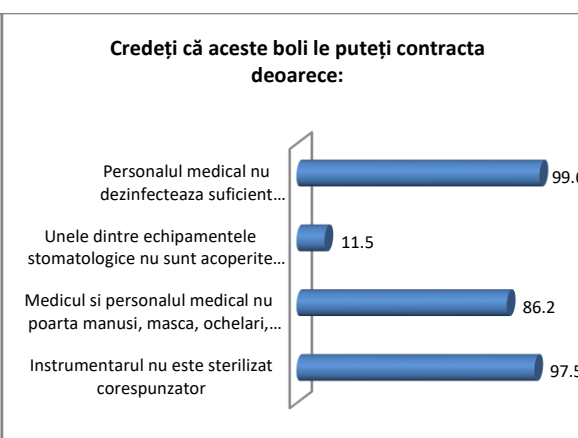


Figure 8. Opinions on the causes of infection transmission

Nearly all participants in the study believe that they can contract a disease if equipment is not disinfected, protective gear is not worn, or if instruments have not been sterilized (Fig. 8).

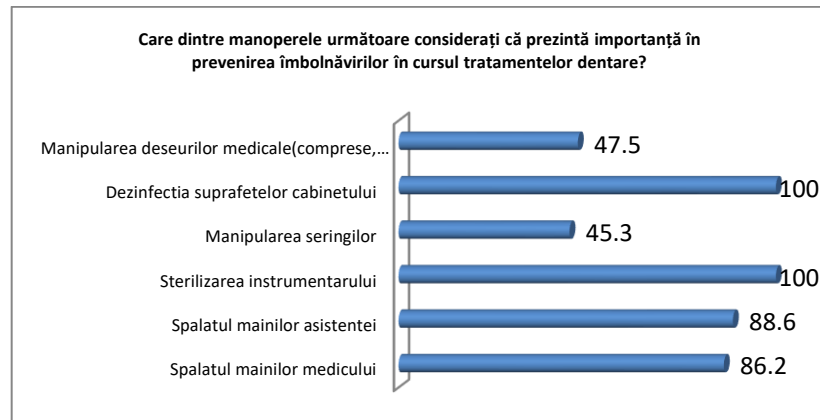


Figure 9. Procedures that can prevent the transmission of infection.

Among the procedures that could reduce the risk of infection, patients unanimously selected sterilization and disinfection (100%), followed by hand washing, and then the handling of syringes and waste (Fig. 9).

Discutions

The dental office is an environment where infection transmission can easily occur. Preventing infection transmission in the clinic is a crucial aspect of dentistry, and therefore practitioners must adopt certain basic measures. Dentists face an increased risk of infection with various microorganisms such as Mycobacterium tuberculosis, hepatitis B and C viruses, staphylococci, streptococci, herpes simplex type 1, HIV, influenza, and rubella (6-11).

The level of knowledge, attitudes, and opinions of patients is important for an effective dental practice through efficient doctor-patient collaboration (12-15). How the patient interacts with the medical staff in the dental office is influenced by their knowledge, with patients often harboring the preconceived notion that infectious diseases are contracted from the dentist (15-18). Current studies show that, in reality, the rate of infection transmission in dental practice is very low (19).

Educating patients through various methods (written materials, advertisements, television programs) about the transmission of infectious diseases can significantly improve patient compliance with dental

procedures (20).

The patients in our study show a moderate level of knowledge regarding diseases that can be transmitted in the dental office, but there is a marked reluctance to visit a clinic where HIV-infected patients have been treated. Although the risk of disease transmission is relatively low, studies indicate that patients avoid dental treatments and even want to be informed if the dentist has infectious diseases (21, 22).

Patients choose a dental clinic based on recommendations, the appearance of the clinic, and the dentist's attire. At the same time, patients are aware that the dentist needs to work with an assistant (23).

To prevent the transmission of infections in the clinic, it is necessary to apply standard precautions for all patients. Additionally, conducting a thorough anamnesis to determine the patient's infectious status is another important element in preventing infection transmission in the dental office. Often, due to time constraints, dentists omit this crucial part. Using questionnaires with clear, targeted questions can highlight the presence of an infectious disease. The fact that we are dealing with a patient at increased risk of infection transmission does not mean that we should refuse to perform dental treatments, but rather organize treatments in the most correct manner (24, 25).

Conclusions

The medical team bears the responsibility of informing patients to reduce the risk of infection transmission, enabling informed patients to choose both the dental clinic and the medical team that best meets their needs. Patients possess good knowledge about the causes of

infection transmission in dental clinics and how medical activities should be organized to minimize this risk. Organizing ongoing medical education actions and implementing specific programs should aim to increase the compliance of both dentists and patients with infection control measures.

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