

## DENTAL PATIENTS' INVOLVEMENT IN INFECTION CONTROL: EDUCATIONAL ASPECTS

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**Abstract:** The dental patients' education regarding the involvement in their own health care, based on the evaluation of their attitudes and knowledge in infection control represents a strategy to strengthen the safety of the dental treatment. The aim of this survey was to evaluate the knowledge and attitudes of dental patients towards cross-infection control measures in dental practices; **Materials and methods.** To assess the patients' approach a questionnaire-based survey was initiated, a total of 110 patients aged between 16 and 68 years being interviewed. Data was processed using SPSS 15.0 in terms of age, gender and level of education. **Results:** 83.6% of the patients trust the medical staff taking into account that it protects them against illness spread. 45.5% of the subjects looking forward to the implementation of infection control procedures. 89,0% of them require that the dentists wear gloves throughout the dental treatment whilst 63.6% prefer the protection mask . **Conclusions** Dental patients' awareness in terms of infection control must influence the dentists' choice of using the equipments and protocols in order to adopt the European safety standards during the dental treatment.

**Key words:** infection control, patient involvement, safety of dental procedures.

### INTRODUCTION

The increase of the educational level leads to a further preoccupation for a health-oriented way of life, as well as for the protection against potential infection sources. The patients' perception on infection prevention is particularly important in motivating the implementation of specific procedures and the option of adopting them by the dentists.

### MATERIALS AND METHODS

In order to assess patients' attitudes regarding the risk of infection and its prevention during dental treatment, a questionnaire-based survey was initiated involving 110 patients aged between 16 and 68 years. In terms of on education level and occupation 20% of patients had a high education, 47.3% were students and 9.1% were retired. 60% of study group were

women, while 40% of them were males. The confidential questionnaire incorporated a total of 18 questions about the safety of the medical procedures in the dental office, the use of protective equipment, the high risk procedures, patients' knowledge about the diseases which may be transmitted during dental treatment. Data was analyzed by age, gender and level of education using SPSS 15.0 ( $p < 0.05$ ).

### RESULTS

The majority of the patients (83.6%) trust the medical staff, considering that it protects them against the spread of infectious diseases. Only 10.9% avoid treatment due to the risk of getting ill and 5.5% consider that they are not at risk during dental treatment. Men (95.5%) showed more confidence in the dental staff than women (75.8%) who manifest an

increased anxiety regarding the risk of disease (Fig. 1).

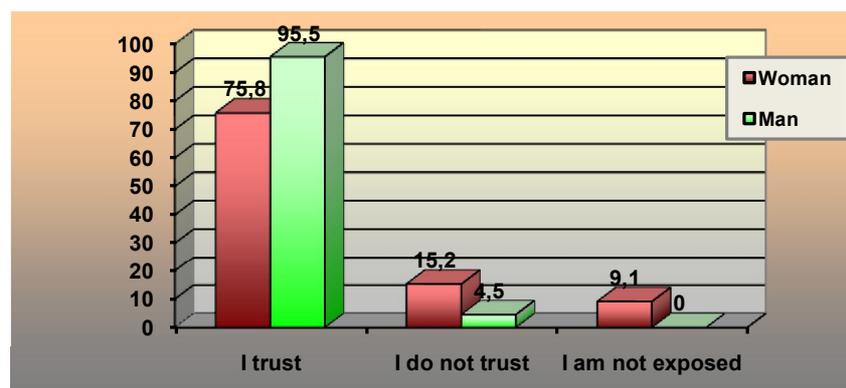


Fig.1. The patients' confidence in the dental staff

45.5% of the patients are interested in the enforcement of the measures to prevent infection transmission during dental treatment after each patient (changing the glass for oral rinses, the protective kit, the disinfection of surfaces). Most of them are young people situated between 19-35 years (46.7%) and 36-64 years (39.1%). Older people (80.2%) and those with medium education (69.2%) trust that appropriate measures are applied. 1.8% of the subjects

are not interested in these issues and 10.9% state they are not familiar with the appropriate measures. Differences by gender were significant, female subjects being twice as interested in the follow up of infection control procedures as males (51.1% vs. 27.3%). Also, 36.4% of men claim that validating the infection control procedures is not of their competence and 9.1% of them do not want to "offend" the medical staff. (Fig.2)

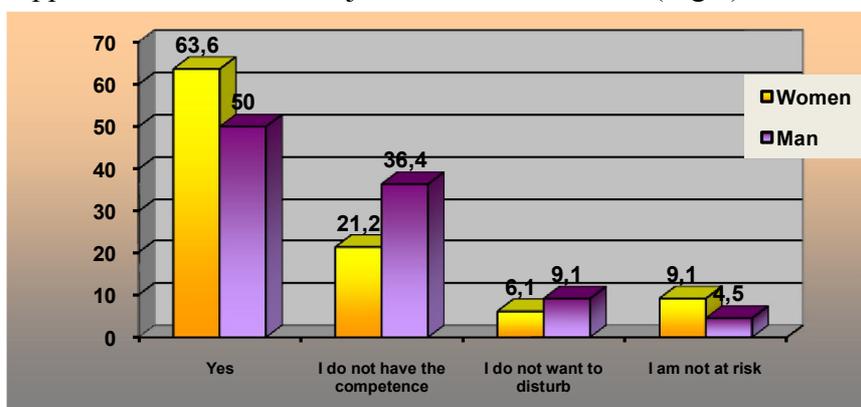


Fig. 2. Patients' involvement in the infection control

The diseases considered by the patients as being at high risk of transmission during dental treatment were HIV infection (67.3%), viral hepatitis B (60.0%), and viral hepatitis C (47.3%) (Fig.3).

The evaluation of the reactions regarding the protective equipment, the main component of Universal Precautions,

revealed that 89.0% of the subjects want the dentist to wear gloves, 63.6% - masks and 47.2% - glasses during the dental treatment (Fig.4).

The procedures considered most important as to prevent diseases during dental treatment were: hands cleaning (78.2%), surface disinfection after each

patient (56.4%) and the handling of the instruments (45, 5%).

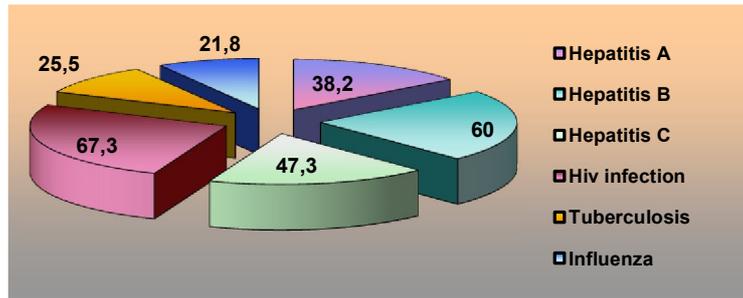


Fig. 3. Patients' insight on disease transmission in dental office

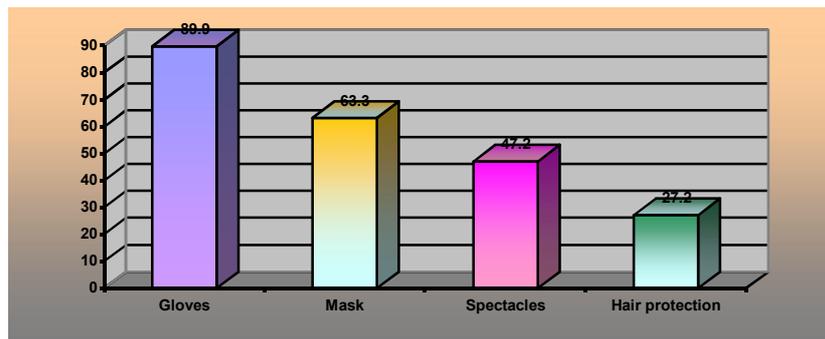


Fig.4. Patients options about the medical protective equipment

## DISCUSSIONS

The study results reveal the patients' confidence in the medical team and the implementation of the infection control measures during the dental treatment. Patients expressed firm attitudes regarding infection control measures adopted by doctors in dental offices. Concerns about infection control procedures used by dentists are questioned especially by young people while older patients claim that they do not have the required facts or believes that would allow them to interfere in the doctor's procedures.

The proportion of subjects who follow the completion of these procedures was significantly lower in men than women. Also, the high level of education results in a high patient involvement in their own health care, with beneficial effects on the safety of the dental treatment. Most patients perceive rubber gloves as the indispensable

protective equipment in order to reduce the risk of infection transmission.

The proportion of patients keen to be involved in assessing the safety measures during the dental treatment is low due to confidence in the medical team, but possibly also because of the lack of knowledge about the risks of infection and the measures required to reduce it.

## CONCLUSIONS

1. The implementation of effective infection control protocols in dental offices is very important as well as the raise of public awareness on the benefits of these practices and the stimulation of their recognition.

2. Health professionals have the compulsion to provide adequate information on the measures taken to reduce the risk of cross infection in order to increase the trust in dental treatments.

3. Effective dentist-patient communication may provide a constructive relationship and can shed light on the risk factors for both medical personnel and patients.

4. The evaluation of the patient perception towards infection control must influence the dentist decision about using the safety equipments and protocols in order to meet the European standards in this domain.

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